

**Multiple Resource Evaluations on Beaver Creek Watershed: an Annotated Bibliography**  
**Compiled by Carl T. Jeffries**  
**(1956-1996)**

1. Beschta, R.L. 1974. Climatology of the ponderosa pine type in central Arizona. Arizona Agricultural Experiment Station, Technical Bulletin 228.
2. Cambell, R.E.; Ryan, M.G. 1982. Precipitation and temperature characteristics of forested watersheds in central Arizona. USDA Forest Service, General Technical Report Rm-93.
3. Cambell, R.E.; Stevenson, O.G. 1977. Solar radiation measurement in northern Arizona. USDA Forest Service, Research Note RM-339.
4. McAda, D.P. 1978. Indexing solar radiation by clouds for snowmelt modeling. MS Thesis, University of Arizona, Tucson, Arizona.
5. McAda, D.P.; Ffolliott, P.F. 1978. Solar radiation as indexed by clouds for snowmelt modeling. *Hydrology and Water Resources in Arizona and the Southwest* 8:175-181.
6. McAda, D.P.; Ffolliott, P.F. 1987. Predicting solar radiation from cloud cover for snowmelt modeling. *Hydrology and Water Resources in Arizona and the Southwest* 17:29-34.
7. Solomon, R.M.; Ffolliott, P.F.; Thompson, J.R. 1976. Correlation between transmissivity and basal area in Arizona ponderosa pine forests. USDA Forest Service, Research Paper RM-318.
8. Ayer, H.W. 1977. The affects of land use policy on employment. *Western Wire* 2(3): 2-3.
9. Ayer, H.W.; Baskett, J. 1978. Elasticities: Supplementary statistics from interindustry studies. *Western Journal of Agricultural Economics* July 1978:75-79.
10. Baskett, J. 1976. Economic impacts of United States Forest Service policies on local communities: An interindustry analysis of the Salt-Verde Basin, Arizona. Ph.D. Dissertation, University of Arizona, Tucson, Arizona.
11. Boster, R.S. 1971. The value of primary versus secondary data in interindustry analysis in Arizona. Ph.D. Dissertation, University of Arizona, Tucson, Arizona.
12. Boster, R.S. 1971a. A Critical appraisal of the environmental movement. *Proceedings of the 1970 National Convention, Society of American Foresters*, 1970.
13. Boster, R.S. 1971b. A critical appraisal of the environmental movement. *Journal of forestry* 69:12-16.
14. Boster, R.S. 1971c. Ground water and the environmental movement. *Ground Water* 9:2-4

15. Boster, R.S.; Danial, T.C. 1972. Measuring public responses to vegetation management. *Arizona Watershed Symposium Proceedings* 16:38-43.
16. Boster, R.S. ; Martin, W. 1972. The value of primary versus secondary data in interindustry analysis: a study in the economics of economic models. *Annals of Regional Science*, 6(2):35-44.
17. Boster, R.S.; O'Connell, P.F.; Thompson, J.C. 1974. Recreation uses change Mogollon Rim economy. *Arizona Review* 23(8-9): 1-7.
18. Brown, T.C. 1976. Alternatives analysis for multiple use management: A case study. USDA Forest Service, Research Paper RM-176.
19. Brown, T.C. 1981. Tradeoff analysis in local land management planing. USDA Forest Service, General Technical Report RM-82.
20. Brown, T.C. 1984. The concept of value in resource allocation. *Land Economics* 60:231-246.
21. Brown, T.C. 1987. Production and cost of scenic beauty: examples for a ponderosa pine forest. *Forest Science* 33:394-410.
22. Brown, T.C. ; Boster, R.S. 1974 Effects of chaparral-to-grass conversion on wildfire suppression costs. USDA Forest Service, Research paper RM-119.
23. Brown, T.C. ; Boster, R.S.1978. On the economics of timber damage appraisal for public forests. *Journal of Forestry* 76:777-780.
24. Brown, T.C. ; Carder, D.R. 1977. Sustained yield of what? *Journal of Forestry* 75:722-723.
25. Brown, T.C. ; O'Connell, P.F. Hibbert, A.R. 1974. Chaparral conversion potential in Arizona. Part II. An Economic Analysis. USDA Forest Service, Research Paper RM-127.
26. Clary, W.P. 1983. Interfacing physical data and economics. In: proceedings of the Range Economics Symposium and Workshop, August 31-September 2, 1978, Salt Lake City, Utah, USDA Forest Service General Technical Report INT-149. Pp. 115-119.
27. Ekholm, A. 1977. The impact of tourism in the Flagstaff trade area. *Northern Arizona Economic Review* 3(4):4.
28. Eskandari, A.; Ffolliott, P.F.; Szidarovszky, F. 1994. Multicriterion decision-making for sustainable watershed resources management. *Pure Mathematics and Applications* 5:379-390.
29. Eskandari, A.; Ffolliott, P.F.; Szidarovszky, F. 1995a. Uncertainty in multicriterion watershed management problems. *Technology: Journal of the Franklin Institute* 332A:199-307.

30. Eskandari, A.; Ffolliott, P.F.; Szidarovszky, F. 1995b. Decision support system in watershed management under uncertainty. In: Mousavi, S.F., and M. Karamooz, M., editors. Regional Conference on Water Resources Management, Isfahan University of Technology, Isfahan, Iran, August 28-30, 1995, pp. 155-164.
31. Eskandari, A.; Ffolliott, P.F.; Szidarovszky, F. 1995c. Decision support system in watershed management. In: Ward, T.J., ed. 1995. Watershed management: Planning for the 21st century. American Society of Civil Engineers, New York, pp. 208-217.
32. Eskandari, A.; Ffolliott, P.F.; Szidarovszky, F. 1995ed. Uncertainty and method choice in discrete multi objective programming problems. *Applied Mathematics and Computations* 69:335-351.
33. Fogal, M.; Ffolliott, P.F.; Tecle, A. 1988. Multi-purpose management of forest resources. In: Kent, B.M., and L.S. Davis, tech. Coords. The 1988 symposium on systems analysis of forest resources. USDA Forest Service, General Technical Report RM-161, pp. 24-29.
34. Kelso, M.M. 1962. Economic of upstream management. *Society of American Foresters proceedings* 1962:120-123.
35. Kelso, M.M.; Mack, L. 1964. The value of additional surface water to agriculture in the Salt River project. *Arizona Watershed Symposium Proceedings* 8:40-47.
- 36 King, D.A.; Ffolliot, P.F. 1972. Rate of value increase: A decision guide for timber management. *Progressive agriculture in Arizona* 24:13-3, 16.
37. Lloyd, R.D. 1969. Economics of multiple use. *Conference on Multiple-Use of Southern Forests Proceedings*. 1969:45-54.
38. Martin, W.E.; Snider, G.B. 1979. Valuation of water and forage from the Salt- Verde Basin of Arizona. University of Arizona, Final Report Prepared by the Department of Agricultural Economics, Tucson, Arizona, Prepared for USDA Forest Service , Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
39. Martin, W.E. ; Snider, G.B. 1980. The value of forage for grazing cattle in the Salt-Verde Basin of Arizona. University of Arizona, Department of Agricultural Economics, Report No. 22, Tucson, Arizona, Prepared for USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
40. Miller, R.L. 1969. Progress in developing multiple use forest watershed production models. *Annals of Regional Science* 3:135-142.
41. Miller, R.L. 1971. Clearing an alligator juniper watershed with saws and chemicals: A cost analysis. USDA Forest Service, Research Note Rm-183.

42. Miller, R.L.; Johnsen, T.N. 1970. Effects of tree and sawyer factors on costs of felling large alligator junipers. USDA Forest Service, Research Paper RM-56.
43. Miller, R.L.; Larson, F.R. 1973. A cost analysis of clearing a ponderosa pine watershed. USDA Forest Service, Research Note RM-231.
44. O'Connell, P.F. 1971. Economic modeling in natural resource planning. Arizona Watershed Symposium Proceedings 14:31-38.
45. O'Connell, P.F. 1972a. Economics of chaparral management in the Southwest. In: Watersheds in Transition Symposium, Fort Collins, Colorado, June, 1972, American Water Resources Association Proceedings Series 14:260-266.
46. O'Connell, P.F. 1972b. Valuation of timber, forage, and water from National Forest lands. Annals of Regional Science 6:1-14.
47. O'Connell, P.F. 1974. Detailed studies in the Salt-Verde watershed. Arizona Watershed Symposium proceedings 18:52-57.
48. O'Connell, P.F. 1977. Economic evaluation of nonmarked goods and services. In: Hughes, J.M., and R.D. Lloyd. Outdoor recreation, advances in application of economics (proceedings of a national symposium). USDA Forest Service, General Technical Report WO-2, p.82-90.
49. O'Connell, P.F.; Boster, R.S. 1974. Demands on national forests require coordinated planning. Arizona Reporter 23:1-7.
50. O'Connell, P.F.; Brown, H.E. 1970. The use of production functions in multiple-use evaluation of land treatments on the Beaver Creek pilot watersheds. American Geophysical Union Transactions 51:753, Abstracts.
51. O'Connell, P.F.; Brown, H.E. 1972. Use of production functions to evaluate multiple use treatments on forested watersheds. Water Resources Research 8:1188-1198.
52. Poudel, P.K. 1979. Capitalization of environmental benefits into property values: Literature review. USDA Forest Service, General Technical Report RM-69
53. Teclé, A. 1988. Choice of multicriterion decision-making techniques for watershed management. Ph.D. Dissertation, University of Arizona, Tucson, Arizona.
54. Teclé, A. 1987. Multiobjective forest watershed management. In: Morel-Seytoux, H.J. and T.G. Sanders editors, Proceedings of the Seventh Annual AGU Front Range Branch Hydrology Days, Colorado State University, Fort Collins, CO, April 21-23, pp. 110-125.

55. Tecle,A.; Covington, W.W.; Wood, D.B.; Fox, B.E. 1989. Conflict resolution in multi resource forest management via multiobjective analysis. In: Tecle,A., W.W. Covington, and R.H. Hamre, Technical Coordinators. 1989. Multi resource management of ponderosa pine forests. USDA Forest Service, General Technical Report RM-185. Pp. 247-258.
56. Tecle,A.; Duckstein,L.; Covington, W.W.; Wood, D.B. 1989. Uncertainty and risk in forest management. In: Tecle,A., W.W. Covington, and R.H. Hamre, Technical Coordinators. 1989. Multi resource management of ponderosa pine forests. USDA Forest Service, General Technical Report RM-185. Pp.208-212.
57. Tecle,A.; Duckstein, L.; Korhonen, P. 1994. Interactive, multiobjective programming for forest resource management. *Applied Mathematics and Computation* 63:75-93.
58. Tecle,A.; Fogel, M.M.; Duckstein, L. 1988. Choice of multicriterion decision making model for forest watershed resources management. In: Kent, B.M., and L.S. Davis, tech. Coords. The 1988 symposium on systems analysis in forest resources. USDA Forest Service, General Technical Report RM-161, pp. 59-67.
59. Tecle,A.; Fogel, M.M.; Duckstein, L. 1988. Choice of multicriterion decision making model for forest watershed resources management. In: Kent, B.M., and L.S. Davis, tech. Coords. The 1988 symposium on systems analysis in forest resources. USDA Forest Service, General Technical Report RM-161, pp. 59-67.
60. Tecle,A.; Fogel, M.M.; Duckstein, L.1988. Multicriterion analysis of forest watershed management alternatives. *Water Resources Bulletin* 24:1169-1178.
61. Tecle, A.; Szidarovszky, F.; Duckstein, L. 1995. Conflict analysis in multi-resource forest management with multiple decision-makers. *Nature & Resources* 31:8-17.
62. Turner, J.M. 1974. Allocation of forest management practices on public lands. *Annals of Regional Science* 8:72-88.
63. Turner, J.M.; Larson, F.R. 1974. Cost analysis of experimental treatments on ponderosa pine watersheds. USDA Forest Service, Research paper RM-116.
64. Wong, P.; Barriga, J.; Carder, D.R. 1976. Methods for estimating traffic volumes and compositions on national forests roads. In: Low-Volume Roads. National Research Council, Transportation Research Board Special Report 160, National Academy of Science, Washington, D.C., pp. 257-266.
65. Worley, D.P.1961. Objectives and methods of economics evaluation on the Beaver Creek watershed project. Western Agricultural Economics Research Council Conference proceedings, Report 9:123-129.
66. Worley, D.P.1962. Some problems in range economics research. *American Society of Range*

Management, Arizona Section, Proceedings 1962:37-38.

67. Worley, D.P.1965. The Beaver Creek pilot watershed for evaluating multiple use effects of watershed treatments. USDA Forest Service, Research Paper RM-13.

68. Worley, D.P.1966. Economic evaluation of watershed management alternatives of the Beaver Creek Watershed - Arizona. New Mexico Water conference Proceedings 11:58-65.

69. Worley, D.P.1966. A Forest inventory approach to multiple use analysis. Proceedings of the Society of American Foresters 1966:138-142.

70. Worley, D.P.; Miller, R.L. 1964. A procedure for upstream watershed economic evaluation. Arizona Watershed Symposium proceedings 8:36-39.

71. Worley, D.P.; Mundell, G.L.; Williamson, R.L. 1965. Gross job time studies-an efficient method for analyzing forestry costs. USDA Forest Service, Research note RM-54.

72. Baker, M.B., Jr.; DeBano, L.F.; Ffolliott, P.F. 1995. Soil loss in pinon-juniper ecosystems and its influence on site productivity and desired future conditions. In: Shaw, site productivity and desired future conditions. In: Shaw, D.W., E.F. Aldon, and C. LoSapio, tech. Coords. 1995. Desired future conditions for pinyon-juniper ecosystems. USDA Forest Service, General Technical Report RM-258, pp. 9-15.

73. Boster, R.S.; Davis, L.R. 1972. Soil-loss considerations inchaparral-to-grass conversions. In: Csallany, S.C.,T.G. McLaughlin, and W.D. Striffler, eds., Watersheds in Transition Symposium, Fort Collins, Colorado, June 1972, American Water Resources Association Proceedings Series 14, pp. 243-250.

74. Dong, C. 1996. Effects of vegetative manipulations on sediment concentrations in Northern-central Arizona. MS Thesis, University of Arizona, Tucson, Arizona.

75. Gabbert, W.A.; Ffolliott, P.F. 1985.Prediction of nutrient and heavy metal transport capacities of suspended sediment In: Proceedings of the symposium on Watershed Management in the Eighties. American Society of Civil Engineers, Denver, Colorado, April 30-May 1, 1985, pp.215-219.

76. Gosz, J.R.; White, C.S.; Ffolliott, P.F. 1979. Nutrient and heavy metal transport capabilities of sediment in the Southwestern United States. Final Report for Eisenhower Consortium Grant #255.

77. Gosz, J.R.; White, C.S.; Ffolliott, P.F.1980. Nutrient and heavy metal transport capabilities of sediment in the Southwestern United States. Water Resources Bulletin 16:927-933.

78. Hansen, E.A. 1966. Suspended sediment concentrations as related to watershed variables in central Arizona. American Society of Civil Engineers, Hydraulics Division, Madison, Wisconsin, August 1966.
79. Heede, B.H. 1984. Overland flow and sediment delivery ; an experiment with small subdrainage in Southwestern ponderosa pine forests (Colorado, USA). *Journal of Hydrology* 72:261-273.
80. Heede, B.H. 1988. The influence of vegetation and its spatial distribution on sediment delivery from selected Arizona forests and woodlands. In: *Erosion control: stay in tune*, proceedings of the 19th International Erosion Control Association conference, New Orleans, Louisiana, February 25-26, 1988, pp.383-392.
81. Lopes, V.I.; Ffolliott, P.F. 1992. Erosion-sedimentation processes on upland watersheds in dryland environment: An initial conceptual development. In: *proceedings of the Southwestern and Rocky Mountain Division, American Association for the Advancement of Science, Sixty-Eighth Annual Meeting*, Tucson, Arizona, May 17-21, 1991, P.30 (Abstract).
82. Lopes, V.I.; Ffolliott, P.F. 1993. Sediment rating curves for clear-cut ponderosa pine watershed in Northern Arizona. *Water Resources Bulletin* 29:369-382.
83. Lopes, V.I.; Ffolliott, P.F. 1995. Effects of forest harvesting practices on streamflow-sediment relationships for Southwestern ponderosa pine watersheds. In: Ward, T.J., ed. 1995. *Watershed management: Planning for the 21st century*. American Society of Civil Engineers, New York, pp. 64-72.
84. Lopes, V.I.; Ffolliott, P.F. Gottfried, G.J.; Baker, M.B., Jr. 1996. Sediment rating curves for pinyon-juniper watersheds in north-central Arizona. *Hydrology and Water Resources in Arizona and the Southwest* 26:29-33.
85. Ward, T.J. 1983. Interpretation and analysis of Beaver Creek sediment research data. Final Report Prepared by New Mexico State University, Las Cruces, New Mexico, Submitted to the Trocky Mountain Forest and Range Experiment Station, Tempe, Arizona.
86. Ward, T.J. ; Baker, M.B., Jr. 1984. Sediment from managed pine watershed in northern central Arizona. Reprinted from *Proc. Of the Specialty Conference*. Sponsored by Irrigation and Drainage Div., ASCE [Flagstaff, AZ., July 24-26, 1984]. Pp. 552-558.
87. Wigdor, Y. 1994. Applicabilty of selected sediment transport equations to pinyon-juniper woodlands. MS Thesis, University of Arizona, Tucson, Arizona.
88. Wigdor, Y.; Lopes, V.I.; Ffolliott, P.F. 1996. Comparison of sediment discharge predictions for small watersheds in the southwestern United States. *International Journal of Sediment Research* 11:22-33.

89. Beaulien, J.T. 1975. Effects of fire on understory plant populations in northern Arizona ponderosa pine forest. MS Thesis, Northern Arizona University, Flagstaff, Arizona.
90. Cambell, R.E.; Baker, M.B., Jr.; Ffolliott, P.F.; Larson, F.R.; Avery, C.C. 1977. Wildfire effects on a ponderosa pine ecosystem. USDA Forest Service Research paper RM-191.
91. Davis, J.R. 1965. A survey of an intentional burn in Arizona ponderosa pine. USDA Forest Service, Research note RM-41.
92. Davis, J.R. Jr.; Ffolliott, P.F.; Clary, W.P. 1968. A fire prescription for consuming ponderosa pine duff. USDA Forest Service, Research Note RM-115.
93. DeBano, F.L.; Baker, M.B., Jr.; Ffolliott, P.F. 1995. Effects of prescribed fire on watershed resources; A conceptual model. Hydrology and Water Resources in Arizona and the Southwest. 22-25:39-44.
94. DeBano, F.L.; Baker, M.B., Jr.; Ffolliott, P.F.; Neary, D.G. 1996. Fire severity and watershed resource response in the Southwest . Hydrology and Water Resources in Arizona and the Southwest 26:39-43.
95. Ffolliott, P.F. 1990. Opportunities for fire management in the future. In: Krammis, J.S., tech. Coord. Effects of fire in management of southwestern natural resources. USDA Forest Service, General Technical Report RM-191, pp. 152-167.
96. Ffolliott, P.F.; Guertin, D.P. 1990. Prescribed fire in Arizona ponderosa pine forests: A 24-year case study. In: Krammis, J.S., tech. Coord. Effects of fire in management of southwestern natural resource. USDA Forest Service, General Technical Report RM-191, pp. 250-254.
97. Ffolliott, P.F.; Clary, W.P.; Larson, F.R. 1976. Fire scene: 11 years after. Progressive Agriculture Arizona 28:12-13.
98. Ffolliott, P.F.; Clary, W.P.; Larson, F.R. 1977. Effects of a prescribed fire in an Arizona ponderosa pine forest. USDA Forest Service, Research Note RM-336,4p.
99. Kruse, W.H. 1972. Effects of wildfire on elk and deer use of a ponderosa pine forest. USDA Forest Service, Research Note RM-226.
100. Lowe, P.O. 1975. Potential wildlife benefits of fire in ponderosa pine forests. MS Thesis, University of Arizona, Tucson, Arizona.
101. Lowe, P.O. Ffolliott, P.F.; Dieterich, J.H.; Patton, D.R. 1978. Determining potential wildlife benefits from wildfire in Arizona ponderosa pine forests. USDA Forest Service, General Technical Report RM-52.



102. Pearson, H.A., Jr.; Davis, R.; Schubert, G.H. 1972. Effects of wildfire on timber and forage production in Arizona. *Journal of Range Management* 25:250-253.
103. Sims, B.D. 1979. Effects of fire on water quality in an Arizona ponderosa pine forest. MS Thesis, University of Arizona, Tucson, Arizona.
104. Sims, B.D.; Lehman, G.S.; Ffolliott, P.F. 1981. Some effects of controlled burning on surface water quality. *Hydrology and Water Resources in Arizona and the Southwest* 11:87-90.
105. Wells, C.G.; Cambell, R.E.; DeBano, L.F.; Lewis, C.E.; Fredridsen, R.L.; Franklin, E.C.; Froelich, R.C.; Dunn, P.H.. 1979. Effects of fire on soil: A state-of-knowledge review. USDA Forest Service, General Technical Report WO-7.
106. Rasmussen, W.O.; Ffolliott, P.F. 1978a. Error processing systems for integrated resource data. In: Lund, H.G., V.J. LaBau, P.F. Ffolliott, and D.W. Robinson, tech. Coords. Integrated inventories of renewable natural resources: Proceedings of the workshop. USDA Forest Service, General Technical Report RM-55, pp. 328-331.
107. Rasmussen, W.O.; Ffolliott, P.F. 1978b. Should an organization use existing data or collect new? In: Proceedings of a workshop on Computer Systems in the Field. Sponsored jointly by Society of American Foresters and Iowa State University Ames, pp. 128-138.
108. Rasmussen, W.O.; Ffolliott, P.F. 1981a. Ecosystem response simulation as an aid in computer assisted utility corridor siting. In: Symposium on environmental concerns in rights-of-way management, U.S. Fish and Wildlife Service and the Electric Power Research Institute, Ann Arbor, Michigan, October 16-18, 1979, pp. 2-1-2-7.
109. Rasmussen, W.O.; Ffolliott, P.F. 1981b. Surface area corrections applied to a resource map. *Water Resources Bulletin* 17:1079-1082.
110. Rasmussen, W.O.; Ffolliott, P.F.; Halfter, G. 1981. Storage, manipulation, and display of geographic multi-resource data for La Michilia Biosphere Reserve in Mexico. In: Lund, H.G., M. Caballero, R.H. Hamre, R.S. Driscoll, and W. Bonner, eds. Arid land resource inventories: Developing cost-efficient methods. USDA Forest Service, General Technical Report WO-28, pp. 528-533.
111. Rasmussen, W.O.; Thames, J.L.; Ffolliott, P.F. 1980 Predicting the spatial variation in erosion. In: Symposium on making watershed management work. American Society of Civil Engineers, Boise, Idaho, July 21-23, 1980, pp. 781-789.
112. Rasmussen, W.O.; Weisz, R.N.; Ffolliott, P.F.; Carder, D.R. 1980. Planning for forest roads a computer-assisted procedure for selection of alternative corridors. *Journal of Environmental Management* 11:93-104.

113. Benfer, J.A.; Beus, S.S. 1968. The relationship of cinders to runoff in the Beaver Creek watersheds. Final Report Prepared by Northern Arizona University, Flagstaff, Arizona, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

114. Beus, S.S. 1968. Gravity data from the Beaver Creek Watersheds, Coconino County, Arizona. Final Report Prepared by Northern Arizona University, Flagstaff, Arizona, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

115. Beus, S.S.; Rush, R.W.; Smouse, D. 1966. Geologic investigation of experimental drainage basins 7-14, Beaver Creek Watershed, Coconino County, Arizona. Final Report Prepared by Northern Arizona University, Flagstaff, Arizona, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

116. Emmons, P.J. 1977. Relationship between seismic velocity, degree of weathering, and seepage potential: Watershed 17, Beaver Creek watershed, Coconino County, Arizona. MS Thesis, Northern Arizona University, Flagstaff, Arizona.
117. Ffolliott, P.E; Fishers, D.L.; Thorud, D.B. 1972. A physiographic survey of the ponderosa pine type on the Salt-Verde River Basin. Agricultural Experiment Station, Technical Bulletin 200, University of Arizona, Tucson.
118. McCabe, K.W. 1971. A geo-botanical study of Stoneman Lake, Wet Beaver Creek experimental drainage basin, Coconino County, Arizona. MS Thesis, Northern Arizona University, Flagstaff, Arizona.
119. McCain, R.G. 1976. Relationship between water loss from stream channels and gravity and seismic measurements: Beaver Creek watershed 7, Coconino County, Arizona. MS Thesis, Northern Arizona University, Flagstaff, Arizona.
120. Rush, R.W. 1965. Report of geologic investigations of six experimental drainage basins, Beaver Creek Watershed, Yavapai County, Arizona. Final Report Prepared by Northern Arizona University, Flagstaff, Arizona, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
121. Rush, R.W.; Smouse, D. 1968. Geologic investigation of experimental drainage basins 15-18 and Bar M Canyon, Beaver Creek Watershed, Coconino County, Arizona. Final Report Prepared by Northern Arizona University, Flagstaff, Arizona, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
122. Scholtz, J.E 1968. Geology of the Woods Canyon drainage basin, Coconino County, Arizona. MS Thesis, Northern Arizona University, Flagstaff, Arizona.
123. Scholtz, J.E 1969a. The Beaver Creek volcanics: a new formation, Coconino- Yavapai Counties, Arizona. Geological Society of America Bulletin 80:2637-2643.
124. Scholtz, J.E 1969b. Evidence for revision of the name Hickey Formation east of the Verde Valley, Coconino County, Arizona. Journal of Arizona Academy of Science 5:182-183.
125. Scholtz, J.E 1969c. Investigation of low-stage transmission losses in stream channels on watersheds 7, 9, 11, and 12; Beaver Creek experimental drainage basin, Coconino County, Arizona. Final Report Prepared by Northern Arizona University, Flagstaff, Arizona, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
126. Thompson, J.R., Jr. 1968. Geology of Wet Beaver Creek Canyon, Yavapai County, Arizona. MS Thesis, Northern Arizona University, Flagstaff, Arizona.
127. Aldon, E.F. 1958. A wet year on Beaver Creek. Arizona Wildlife-Sportsman 29:22.23.
128. Anderson, R.J. 1980. Relationship between rainfall and storm runoff for selected Arizona watersheds. MS Thesis, Utah State University, Logan, Utah.
129. Avery, C.C.; Baker, M.B., Jr. 1980. Evaluating hydrologic responses to forest activities. In: Symposium on watershed Management, Proceedings of American Society of Civil Engineers, Watershed Management Symposium, Irrigation and Drainage Division, pp. 485-493.
130. Baker, M.B., Jr. 1981. Hydrologic regimes of three vegetation types across the Mogollon Rim. Hydrology and Water Resources in Arizona and the Southwest 11:5-12.

131. Baker, M.B., Jr. 1982a. Hydrologic regimes of forested areas in the Beaver Creek watershed. USDA Forest Service, General Technical Report RM-90.
132. Baker, M.B., Jr. 1982b. Influence of clearing ponderosa pine on timing of snowmelt runoff. Western Snow Conference 50:20-26.
133. Baker, M.B., Jr. 1987. Diversity in streamflow response from upland basins in Arizona. In: Troendle, C.A., M.R. Kaufmann, R.H. Hamre, and R.P. Winokur, Technical Coordinators. Management of subalpine forests: building on 50 years of research: proceedings of a technical conference; July 6-9, 1987, Silver Creek, CO., USDA Forest Service, General Technical Report RM-149, pp. 211-215.
134. Baker, M.B., Jr.; Brown, H.E.; Champagne, N.E., Jr. 1971. Hydrologic performance of the Beaver Creek watersheds during a 100-year storm. American Geophysical Union Transactions 52:828. (Abstract)
135. Beschta, R.L. 1974. Streamflow hydrology and simulation of the Salt River Basin in central Arizona. PhD Dissertation, University of Arizona, Tucson, Arizona.
136. Brown, H.E. 1965. Characteristics of recession flows from small watersheds in a semiarid region of Arizona. Water Resources Research 1:517-522.
137. Decker, J.P.; Skau, C.M. 1964. Simultaneous studies of transpiration rate and sap velocity in trees. Plant Physiology 39:213-215.
138. Ffolliott, P. E 1991. Winter course of transpiration in Arizona ponderosa pine trees. Hydrology and Water Resources in Arizona and the Southwest 21:77-79.
139. Ffolliott, RE; Brooks, K.N. 1990. Forest hydrology and watershed management in the world. In: Ffolliott, P.F., and D.P. Guertin, eds. Proceedings of a workshop: Forest hydrological resources in China-An analytical assessment. U.S. Department of State, Publication 9829, pp. 22-54.
140. Ffolliott, P.E; Brooks, K.N. 1993. Process studies in forest hydrology: A worldwide review. In: Pre-Conference Proceedings of the International Conference on Hydrology and Water Resources, New Delhi, India, December 20-22, 1993, pp. 52-53. (Abstract)
141. Ffolliott, P.E; Brooks, K.N. 1996. Process studies in forest hydrology: A worldwide review. In: Singh, V.P., and B. Kumar, editors. Surface-Water Hydrology. Kluwer Academic Publishers, The Netherlands, pp. 1-18.
142. Ffolliott, P.E; Lopes, V.L. 1993. Process studies in watershed hydrology: A worldwide review In: Proceedings of the First International Seminar of Watershed Management. University of Sonora, Herinosillo, Mexico, November 17-18, 1992, pp. 87-104.
143. Ffolliott, P.E; Fogel, M.M.; Thames, J.L. 1982. Hydrological characteristics of the Lower Colorado River Basin. In: Proceedings of the International Symposium on Hydrological Aspects of Mountainous Watersheds. University of Roorkee, Roorkee (UP), India, November 4-6, 1982, pp. IX-35- IX-40.
144. Haddad, M.S. 1990. The effects of watershed treatments on the relationship between runoff peak and volume for the Beaver Creek Watershed, Arizona. MS Thesis, University of Arizona, Tucson, Arizona.
145. Hawkins, R.H. 1976. Runoff curve numbers for northern Arizona watersheds. Final Report Prepared by Utah State University, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
146. Li, R.M.; Simons, D.B.; Stevens, M.A. 1976. Morphology of cobble streams in small watersheds. Journal of

Hydraulic Division, American Society of Civil Engineers. Vol. 102, HY8, pp. 1101-1117.

147. Reich, B.M. 1971. Runoff estimates for small rural watersheds. Final Report Prepared by Pennsylvania State University, Submitted to the Federal Highway Administration, Washington, D.C.

148. Reich, B.M.; Osborn, H.B.; Baker, M.B., Jr. 1979. Tests on Arizona's new flood estimates. Hydrology and Water Resources in Arizona and the Southwest 9:65-74.

149. Salvocci, G. 1990. Beaver Creek data. Final Report Prepared by Massachusetts Institute of Technology, Cambridge, Massachusetts, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

150. Skau, C.M. 1960. Some hydrologic characteristics in the Utah juniper type of northern Arizona. PhD Dissertation, Michigan State University, East Lansing, Michigan.

151. Skau, C.M. 1961. Some hydrologic influences of cabling juniper. USDA Forest Service Research Note 62.

152. Skau, C.M. 1964. Interception, throughfall, and stemflow in Utah and alligator juniper cover types of northern Arizona. Forest Science 10:283-287.

153. Skau, C.M.; Swanson, R.H. 1963. An improved heat pulse velocity meter as an indicator of sap speed and transpiration. Journal of Geophysical Research 68:4743-4749.

154. Sulaiman, W.N. 1981. An analysis of recession flows from different vegetation types. MS Thesis, University of Arizona, Tucson, Arizona.

155. Sulaiman, W.N.; Ffolliott, P.E. 1981. An analysis of recession flows from different vegetation types. Hydrology and Water Resources in Arizona and the Southwest 11:43-46.

156. Teale, A. 1991. Chapter 5. Hydrology and watershed management in southwestern ponderosa pine forests. In: Teale, A. and W.W. Covington, Technical editors. 1991. Multi resource management of southwestern ponderosa pine forests: The status of knowledge. USDA Forest Service, Southwestern Region Report, pp. 162-272.

157. Thorud, D.B.; Ffolliott, P.E. 1971. The 1970 Labor Day storm-a composite report. Arizona Watershed Symposium 15:46-55.

158. Thorud, D.B.; Ffolliott, P.E. 1972. The Labor Day storm of 1970 in Arizona. Western Snow Conference 40:37-42.

159. Thorud, D.B.; Ffolliott, P.E. 1973. A comprehensive analysis of a major storm and associated flooding in Arizona. Arizona Agricultural Experiment Station, Technical Bulletin 202.

160. Waring, R.H.; Rogers, J.J.; Swank, W.T. 1981. Water relations and hydrologic cycles. In: Dynamic Properties of Forest Ecosystems, IBP 23, Cambridge University Press. pp. 205-264.

161. Baker, M.B., Jr. 1986. A supercritical flume for measuring sediment-laden streamflow. Water Resources Bulletin 22(5): 847-851.

162. Brown, H.E. 1962. The canopy camera. USDA Forest Service, Research Paper RM-72.

163. Brown, H.E. 1969. A combined control-metering section for gaging large streams. Water Resources Research 5:888-894.

164. Brown, H.E.; Hansen, E.A.; Champagne, N.E., Jr. 1969. A system for measuring total sediment yield from

small watersheds. American Geophysical Union Transactions 50:615. (Abstract)

165. Brown, H.E.; Hansen, E.A.; Champagne, N.E., Jr. 1970. A system for measuring total sediment yield from small watersheds. Water Resources Research 6:818-826.

166. Brown, H.E.; Worley, D.P. 1965. Some applications of the canopy camera in forestry. Journal of Forestry 63:674-680.

167. Chamberlain, A.R. 1957. Preliminary model tests of a flume for measuring discharge of steep ephemeral streams. Final Report CER No. 57ARC12, Prepared by Civil Engineering Department, Colorado Agricultural and Mining College, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

168. Ffolliott, P.E 1965. A multiple BAF angle gage. USDA Forest Service, Research Note RM-43.

169. Ffolliott, RE 1990. Manual on watershed instrumentation and measurements. ASEAN-US Watershed Management Project, College, Laguna, Philippines.

170. Hansen, E.A. 1966. Field test of an automatic suspended-sediment pumping sampler. Transactions American Society of Agricultural Engineers 9:738-741, 743.

171. Larson, ER. 1974. Formulating conversion tables for stick-measure of Sacramento precipitation storage gages. USDA Forest Service, Research Note RM-276.

172. Pearson, H.A.; Morrison, D.C.; Wolke, W.K. 1969. Trick tanks: Water developments for range livestock. Journal of Range Management 22:359-360.

173. Robinson, A.R. 1959. Trapezoidal measuring flumes for determining discharge in steep ephemeral streams. Final Report CER59ARR1 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

174. Robinson, A.R. 1960. Model study of a trapezoidal flume for measurement of stream discharge. Final Report CER59AR37 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

175. Robinson, A.R. 1961. Study of the Beaver Creek measuring flumes. Final Report CER61ARR10 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

176. Robinson, A.R.; Chamberlain, A.R. 1958. Trapezoidal flumes for open channel flow measurement. Final Report CER58ARR39 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

177. Robinson, A.R.; Chamberlain, A.R. 1960. Trapezoidal flumes for open channel flow measurement. Transactions of American Society Agricultural Engineers 3:120-128.

178. Barger, R.L.; Ffolliott, P.F. 1969. Multiproduct timber inventory. Forest Products Journal 19:31-36.

179. Barger, R.L.; Ffolliott, RE 1969. Multiproduct timber inventory. In: 21st Annual Meeting of the Forest Products Research Society, July, 1967, Vancouver, British Columbia, Canada.

180. Barger, R.L.; Ffolliott, P.E 1970. Evaluating product potential in standing timber. USDA Forest Service, Research Paper RM

181. Clary, W.P. 1964. A method for predicting potential herbage yield on the Beaver Creek pilot watersheds.

In: Forage Plant Physiology and Soil-Range Relationships. American Society of Agronomy. ASA Special Publication 5:244-250.

181. Clary, W.P. 1964. A method for predicting potential herbage yield on the Beaver Creek pilot watersheds. In: Forage Plant physiology and Soil-Range Relationships. American Society of Agronomy. ASA Special publication 5:244-250.

182. Clary, W.P. 1969. Increasing sampling precision for some herbage variables through knowledge of the timber overstory. Journal of Range Management 22:200-201.

183. Ffolliott, P.E 1965. Determining growth of ponderosa pine in Arizona by stand projection. USDA Forest Service, Research Note RM-52.

184. Ffolliott, P.E 1978. A multifunctional inventory approach to multiple use analysis. In: Lund, H.G., V.J. LaBau, P.E Ffolliott, and D.W. Robinson, editors. Proceedings, Integrated Inventories of Renewable Natural Resources. USDA Forest Service, General Technical Report RM-55, pp. 395-402.

185. Ffolliott, P.E; Barger, R.L. 1965. A method of evaluating multiproduct potential in standing timber. USDA Forest Service, Research Paper RM-15.

186. Ffolliott, P.F.; Barger, R.L. 1971. New approach to estimating timber products. Progressive Agriculture in Arizona 23:11-13.

187. Ffolliott, P.E; Worley, D.P. 1965. An inventory system for multiple use evaluations. USDA Forest Service, Research Paper RM-17.

188. Ffolliott, P.E; Worley, D.P. 1973. Forest stocking equations: Their development and application. USDA Forest Service, Research Paper RM-102.

189. Garrett, L.D. 1982. Interdisciplinary research for Multi resource forest management: an example. In: Russel, M.G., editor. Enabling interdisciplinary research: perspectives from agriculture, forestry, and home economics. University of Minnesota Agricultural Experiment Station Miscellaneous Publication 19, pp. 147-152.

190. Garrett, L.D. 1983. Multi resource research and its implications to management: the Beaver Creek Biosphere Reserve. In: Patton, D.R., et al., technical coordinators. Wildlife and range research needs in northern Mexico and southwestern United States, workshop proceedings, USDA Forest Service General Technical Report WO-36, pp. 40-44. -57.

191. Garrett, L.D.; Rogers, J.J.; Prosser, J.M. 1982. Multi resource inventory and analysis system: Gaining maximum benefit for land managers. In: Brann, E.B., L.O. House, IV, H.G. Lund, editors, In: Place resource inventories: principles and practices, Proceedings of a national workshop, Orono, Maine, August 9-14, 1981, Society of American Foresters, pp. 1011-1017.

192. Ilch, D.M. 1967. Researchers also contribute to management improvement. USDA Forest Service, Division of Administrative Management, Management Notes 19, pp. 17-19.

193. Larson, E.R.; Minor, C.O. 1968. A comparison of stand density measurements for ponderosa pine in the Southwest. Arizona Forestry Notes No. 4, School of Forestry, Northern Arizona University.

194. Larson, E.R.; Moessner, K.E.; Ffolliott, P.E 1971. A comparison of aerial photo and ground measurements of ponderosa pine stands. USDA Forest Service, Research Note RM-192.

195. Larson, E.R.; Ffolliott, P.E; Moessner, K.E. 1974. Using aerial measurements of forest overstory and topography to estimate peak snowpack. USDA Forest Service, Research Note RM-267.

196. Lund, H.G.; LaBau, V.J.; Ffolliott, P.E; Robinson,, D.W., technical coordinators. 1978. Integrated inventories of renewable natural resources: Proceedings of the workshop. USDA Forest Service, General Technical Report RM-55.
197. Senn, R.A., Jr. 1976. A descriptive inventory of ponderosa pine on national forests in the Salt-Verde Basin, Arizona. USDA Forest Service General Technical Report RM-26.
198. Worley, D.P. 1966. A forest inventory approach to multiple use analysis. Society American Foresters 1966:138-142.
199. Baker, M.B., Jr. 1975. Modeling management of ponderosa pine forest resources. In: Proceedings of the 1975 watershed management symposium, Logan, Utah, August 11-13, American Society of Civil Engineers, Irrigation and Drainage Division, pp. 478-493.
200. Baker, M.B., Jr.; Carder, D.R. 1976. An approach for evaluating water yield and soil loss models. Earth Sciences Symposium Proceedings, Fresno, California.
201. Baker, M.B., Jr.; Rogers, J.J. 1983. Evaluations of water balance models on a mixed conifer watershed. Water Resource Research 19:486-492.
202. Bojorquez-Tapia, L.A. 1987. Multiple-resource modelling in the forest and woodland ecosystems of Arizona. PhD Dissertation, University of Arizona, Tucson, Arizona.
203. Bojorquez-Tapia, L.A.; Ffolliott, P.E; Guertin, D.P. 1990. Multiple-resource modeling as a tool for conservation: Its applicability in Mexico. Environmental Management 14:317-324.
204. Brown, T.C.; Daniel, T.C. 1984. Modeling forest scenic beauty: concepts and application to ponderosa pine. USDA Forest Service Research Paper RM-256.
205. Clary, W.P.; Jensen, C.E. 1981. Mathematical hypothesis for herbage production potential on pinyon-juniper areas. USDA Forest Service Research Paper INT-279.
206. Ffolliott FE 1985. Application of multiple-resource modeling in watershed management. Working Paper for the International Center for Integrated Mountain Development, Kathmandu, Nepal.
207. Ffolliott, P.E; Guertin, D.P.; Rasmussen, W.O. 1988. A model of snowpack dynamics in forest openings. Hydrology and Water Resources in Arizona and the Southwest 18:1-6.
208. Gabbert, W.A. 1982. Simulation of nutrient and heavy metal transport capacity of suspended sediment. MS Thesis, University of Arizona, Tucson, Arizona.
209. Gabbert, W.A.; Ffolliott, RE; Rasmussen, W.O. 1982. SEDCON: A model of nutrient and heavy metal losses in suspended sediment. Hydrology and Water Resources in Arizona and the Southwest 12:111-116.
210. Gieske, M.H.; Boster, R.S. 1971. DAMID, A discounting analysis model for investment decisions. USDA Forest Service Research Note RM-200.
211. Heidt, J.D.; Jameson, D.A.; Barger, R.L.; Erickson, B.J. 1971. Determining timber conversion alternatives through computer analysis. USDA Forest Service, Research Paper RM-74.
212. jasinski, M.E 1989. Physically-based parameterization of spatially variable soil and vegetation using satellite multispectral data for mesoscale hydrology. DS Dissertation, Massachusetts Institute of Technology,



Cambridge, Massachusetts.

213. Larson, ER.; Ffolliott, P.E; Rasmussen, W.O.; Carder., D.R. 1979. Estimating impacts of silvicultural management practices on forest ecosystems. In: Best Management Practices for Agriculture and Silviculture, Proceedings of the 1978 Cornell Agriculture Waste Management Conference, pp. 281-294.
214. Li, R.M.; Carder, D.R.; Simons, D.B.; Shiao, L.Y. 1977. Mathematical modeling of sediment yield from forest logging roads. In: Proceedings of First International Conference on Mathematical Modeling, St. Louis, MO.
215. Li, R.M.; Simons, D.B.; Carder, D.R. 1976a. Mathematical modeling of overland flow soil erosion. In: Natural Soil Erosion Conference: Prediction and Control, May 25-26. Soil Conservation Society of America, Special Publication No. 21.
216. Li, R.M.; Simons, D.B.; Eggert, K.G. 1976. Process model of infiltration and subsurface flow routing. Final Report CER76-77 RML-DBS-KGE 20 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
217. Li, R.M.; Simons, D.B.; Simons, R.K. 1977. A mathematical model for evaluating on-site soil erosion. Final Report CER76-77 RML-DBS-RKS 40 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
218. Li, R.M.; Simons, D.B.; Stevens, M.A. 1973. Review of literature: Cooperative study on development of models for predicting sediment yield from small watersheds. Final Report CER72-73RNL-DBS-MAS14 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
219. Li, R.M.; Simons, D.B.; Stevens, M.A. 1975. On overland flow water routing. In: Proceedings of the National Symposium on Urban Hydrology and Sediment Control [Univ. of Kentucky, Lexington, July 28-31.
220. Li, R.M.; Simons, D.B.; Stevens, M.A. 1976. Morphology of cobble streams in small watersheds. Journal of Hydraulic Division, American Society of Civil Engineers. Vol. 102, HY8, pp. 1101-1117.
221. Li, R.M.; Simons, D.B.; Ward, T.J.; Orvis, C.J. 1979. Hydraulic model study of flow control structures. Final Report CER78-79RML-DBS-TJW-CJO51 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
222. Li, R.M.; Simons, D.B.; Ward, T.J.; Steele, K.S. 1977. Hydraulic model study of flow control structures. Final Report CER 77-78 RML-DBS-TJW-KSS 15 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
223. Lopes, V.L.; Ffolliott, P.F. 1992. Modeling sediment processes on small watersheds: A conceptual framework I. Broad shallow flow processes. International journal of Sediment Research 7:21-44.
224. Lopes, V.L.; Ffolliott, P.F. 1993a. A conceptual framework for modeling sediment processes in upland watersheds. In: Pre-Conference Proceedings of the International Conference on Hydrology and Water Resources, New Delhi, India, December 20-22, 1993, pp. 59. (Abstract)
225. Lopes, V.L.; Ffolliott, P.F. 1993b. Modeling sediment processes on small watersheds: A conceptual framework. 11. Concentrated flow processes. International journal of Sediment Research 8:1-23.
226. Lovely, C.J. 1976. Hydrologic modeling to determine the effect of small earthen reservoirs on ephemeral streamflow. MS Thesis, University of Arizona, Tucson, Arizona.

227. McGurk, B.J. 1982. A comparison of four rainfallrunoff methods. PhD Dissertation, Utah State University, Logan, Utah.
228. O'Connell, P.E 1970. Economic modelling in natural resource planning. Arizona Watershed Symposium Proceedings 14:31-38.
229. Reich, B.M. 1971. Feasibility study of conceptual models for Beaver Creek hydrology. Final Report Prepared by Pennsylvania State University, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
230. Simons, D.B.; Li, R.M. 1975. Watershed segmenta by a digital computer for mathematical modeling of watershed response. Final Report CER75-76DBSRML9 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
231. Simons, D.B.; Li, R.M. 1976. Procedure for estimating model parameters of a mathematical model. Final Report CER75-76DBS-RML22 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
232. Simons, D.B.; Li, R.M. 1977. In-field estimation of infiltration parameters. Report Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
233. Simons, D.B.; Li, R.M. 1980. Modeling of sediment nonpoint source pollution from watersheds. In: Overcash, M.R., and J.M. Davidson, editors. Envirorunental impact of nonpoint source pollution. pp. 341-373.
234. Simons, D.B.; Carder, D.R.; Li, R.M. 1977. Principle and application of mathematical modeling of watershed and river systems. In: Proceedings of the First Intemational Conference on Mathematical Modeling. [St. Louis, Mo.
235. Simons, D.B.; Li, R.M.; Eggert, K.G. 1977a. Simple water routing and yield model using a small programmable calculator. Final Report CER76-77-DBS-RMLKGE52 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
236. Simons, D.B.; Li, R.M.; Eggert, K.G.; Zachmann, D. 1981. Quasi-analytical formulation for calculation of infiltration and runoff. Final Report Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
237. Simons, D.B.; Li, R.M.; Shiao, L.Y. 1976. Preliminary procedural guide for estimating water and sediment yield from roads in forests. Final Report CER76-77DBSRML-LYS21 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
238. Simons, D.B.; Li, R.M.; Shiao, L.Y. 1977. Formulation of road sediment model. Final Report CER76-77DBS-RML-LYS50 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

239. Simons, D.B.; Li, R.M.; Stevens, M.A. 1975. Development of models for predicting water and sediment routing and yield from storms on small watersheds. Final Report CER74-75DBS-RML-MAS24 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
240. Simons, D.B.; Li, R.M.; Ward, T.J. 1977. Simple procedural method for estimating onsite soil erosion. Final Report CER76-77RML-DBS-TJW38 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
241. Simons, D.B.; Li, R.M.; Ward, T.J. 1978a. Estimation of parameters that describe channel geometry for watershed modeling. Final Report CER77-78DBS-RMLTJW12 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
242. Simons, D.B.; Li, R.M.; Ward, T.J. 1978b. Equation and computer programs that develop design tables for estimating road sediment yield. Final Report CER7778DBS-RML-TJW40 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
243. Simons, D.B.; Li, R.M.; Ward, T.J. 1978c. Mapping of potential landslide areas in terms of slope stability. Final Report CER78-79DBS-RML-TJW19 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
244. Simons, D.B.; Li, R.M.; Ward, T.J. 1980. Application of road sediment models to natural and simulated rainfall-runoff sites. Final Report CER79-80DBS-RMLTJW66 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
245. Simons, D.B., R.M. Li, and T.J. Ward. 1981. Analysis of data collection and processing system for Beaver Creek Watershed, Arizona. Final Report CER79-SODBSRML-TJW68 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
246. Simons, D.B.; Li, R.M.; Ward, T.J.; Ballantine, M. 1980. Methodology for estimating erosion rates and sediment yields for lead forest land management alternatives. Final Report Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
247. Simons, D.B.; Li, R.M.; Ward, T.J.; Ballantine, M. 1981. User's guide for providing model input information for a generalized land planning model. Final Report CER80-81DBS-RML-TJW-MJB40 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
248. Simons, D.B.; Li, R.M.; Ward, T.J.; Shiao, L.Y. 1978. Simple road sediment yield model. Final Report CER7778DBS-RML-TJW-LYS41 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
249. Baker, M.B., Jr.; Brown, H.E. 1974. Multiple use evaluations on ponderosa pine forest land. Arizona Watershed Symposium Proceedings 18:18-25.
250. Brown, H.E. 1965. Preliminary results of cabling Utah juniper, Beaver Creek watershed evaluation project. Arizona Watershed Symposium Proceedings 9:16-20.
251. Brown, H.E.; Baker, M.B., Jr.; Rogers, J.J.; Clary, W.P.; Kovner, J.L.; Larson, E.R.; Avery, C.C.; Campbell, R.E. 1974. Opportunities for increasing water yields and other multiple use values on ponderosa pine forest lands. USDA Forest Service, Research Paper RM-129.

252. Clary, W.P. 1974. Pinyon-juniper control-does it pay? Arizona Watershed Symposium Proceedings 18: 26-29.
253. Clary, W.P. 1975a. Present and future multiple use demands on the pinyon- juniper type. In: The pinyon-juniper ecosystem: A symposium, Utah State University, Logan, Utah, pp. 19-26.
254. Clary, W.P. 1975b. Multiple use effects of manipulating pinyon-juniper. In: Proceedings of the 1975 watershed management symposium, Logan, Utah, American Society of Civil Engineers, Irrigation and Drainage Division, pp. 469-477.
255. Clary, W.P. 1977. Producer-consumer biomass on forested and nonforested Arizona fescue range. Abstract of Papers, 30th Annual Meetin& Society for Range Management, Portland, Oregon, p. 9.
256. Clary, W.P. 1978. Producer-consumer biomass in Arizona ponderosa pine. USDA Forest Service, General Technical Report RM-56.
257. Clary, W.R 1987. Herbage production and livestock grazing on pinyon- juniper woodlands. In: Evereft, R.L., compiler, Proceedings of the Pinyon-juniper Conference, January 13-16, 1986, Reno, Nevada. USDA Forest Service General Technical Report INT-215. pp. 440-447.
258. Clary, W.P.; Baker, M.B., Jr.; O'Connell, P.F.; Johnsen, T.N., Jr.; Campbell, R.E. 1974. Effects of pinyon-juniper removal on natural resource products and uses in Arizona. USDA Forest Service, Research Paper RM-128.
259. Clary, W. P.; Ffollioft, PE; Larson, ER. 1984. Producerconsumer biomass in montane forests on the Arizona Mogollon Plateau. The Great Basin Naturalist 44:627-634.
260. Clary, W.P.; Kruse, W.H.; Larson, ER. 1975. Cattle grazing and wood production under different ponderosa pine basal areas. journal of Range Management 28:434-437.
261. Ffolliott,, P.E 1980. UNESCO's Man and the Biosphere Program: Interdisciplinary and international collaboration on environmental research in temperate forests. The 140th National Meeting of the American Association for the Advancement of Science, San Francisco, Califomia, January 3- 8, 1980, AAAS Publication 80-2, p.33. (Abstract)
- Ffolliott, P.E 1983a. Moderator's comments: Research on biosphere reserves. In: Patton, D.R., J. de la PuenteE., P.E Ffolliott, S. Gallina, and E.T. Bartlett, technical coordinators. Wildlife and range research needs in northern Mexico and southwestern United States: Workshop proceedings. USDA Forest Service, General Technical Report WO-36, pp. 32-33.
263. Ffolliott, P. F. 1983b. Multi resource management on the Beaver Creek Biosphere Reserve, United States. Program on the Man and the Biosphere (MAB), Newsletter for Project 2 5:11-15.
264. Ffolliott, PE 1992. Multiple values of woodlands in the southwestern United States and northern Mexico. Ffolliott, P.E, G.J. Gottfried, D.A. Bennett, V.M. Hernandez, A. Ortega-Rubio, and R.H. Hamre, technical coordinators. Ecology and management of oak and associated woodlands: Perspectives in the southwestern United States and northern Mexico. USDA Forest Service, General Technical Report RM-218, pp. 17-23.
265. Ffolliott, P.E; Baker, M.B., Jr. 1977. Characteristics of Arizona ponderosa pine stands on sandstone soils. USDA Forest Service, General Technical Report RM-44.
266. Ffolliott, P.E; Bartlett, E.T. 1991. Dry forests of North America: Opportunities for multiple use resource management. In: Ffolliott, P.F., and W.T. Swank, eds. People and the temperate region: A summary of

research from the United States Man and the Biosphere Program. U.S. Department of State, Publication 9838, pp. 41-44.

267. Ffolliott, P.F.; Brooks, K.N. 1985. Forest resources: Multiple use concept. In: Report of the FAO/Finland Training Course in Forestry and Watershed Management for Asia and the Pacific Region, Katmandu, Nepal, May 19-31, 1985. FAO, Rome Italy, pp. 81-87.
268. Ffolliott, P.E; Brooks, K.N. 1986. Multiple use: Achieving diversified and increased income within a watershed management framework. In: Strategies, approaches and systems in integrated watershed management. FAO Conservation Guide 14, pp. 114-123.
269. Ffolliott, P.E; Brooks, K.N. 1989. The role of multiple use in integrated watershed management watershed management. Journal of Science and Techniques of Soil and Water Conservation in Shanxi Province 1989 2:43-47. (Chinese)
270. Ffolliott, P.E; Thorud, D.B. 1976. Watershed management effects on many resources. Arizona Watershed Symposium Proceedings 19:39-42.
271. Ffolliott, P.E; Thorud, D.B. 1977. Water resources and multiple use forestry in the Southwest. Journal of Forestry 75(8):469-472.
272. Ffolliott, P. E; Clary, W.P.; Kruse, W.H. 1978. Effects of grazing on multiple use values of a cleared ponderosa pine watershed. In: Abstract of papers. The 31st Annual Meeting of the Society for Range Management, San Antonio, Texas, February 7-9, 1978, p. 46. (Abstract)
273. Fox, K.; Garrett, L.D. 1989. Beaver Creek and Multi resource management forestry. In: Tecle, A., W.W. Covington, and R.H. Hamre, Technical Coordinators. 1989. Multi resource management of ponderosa pine forests. USDA Forest Service, General Technical Report RM-185. pp. 1-5.
274. Garrett, L.D. 1986. Understanding Multi resource options on Arizona's national forest system lands. Arizona Water Symposium Proceedings 30:39-47.
275. Pearson, H.A.; Jameson, D.A. 1967. Relationship between timber and cattle production on ponderosa pine range: The Wild Bill Range. USDA Forest Service, Fort Collins, Colorado.
276. Pollisco, R.R.A. 1987. Management of pinyon-juniper woodlands for the sustained yield of wood and water. MS Thesis, University of Arizona, Tucson, Arizona.
277. Smith, J.H.G. 1980. The conference tours: A synthesis of observations on multiple-use research and application in northern Arizona. In: IUFRO/MAB Conference: Research on multiple use of forest resources. USDA Forest Service, General Technical Report WO-25. pp. 155-158.
278. Tecle, A.; Covington, W.W. Technical editors. 1991. Multi resource management of southwestern ponderosa pine forests: The status of knowledge. USDA Forest Service, Southwestern Region Report.
279. Tecle, A.; Covington, W.W.; Hamre, R.H. Technical Coordinators. 1989. Multi resource management of ponderosa pine forests. USDA Forest Service, General Technical Report RM-185.
280. Tecle, A.; Covington, W.W.; McTague, J.P.; Richards, M.T.; Patton, D.R. 1991. Field guide for Multi resource management of southwestern ponderosa pine forests. USDA Forest Service, Southwestern Region Report.
281. Anderson, L.M. 1978. Social influences on public perception of the scenic quality of forested landscapes. PhD Dissertation, University of Arizona, Tucson, Arizona.

282. Arthur, L.M. 1975. Testing the predictive utility of scenic beauty description models. PhD Dissertation, University of Arizona, Tucson, Arizona.
283. Arthur, L.M. 1977. Predicting scenic beauty of forest environments: Some empirical tests. *Forest Science* 23(2):151-160.
284. Arthur, L.M.; Boster, R.S. 1976. Measuring scenic beauty: A selected annotated bibliography. USDA Forest Service, General Technical Report RM-25.
285. Arthur, L.M.; Daniel, T.C.; Boster, R.S. 1977. Scenic assessment: An overview. *Landscape Planning* 4:109-129.
286. Boster, R.S. 1973. On the criteria for and possibility of quantifying the esthetics aspects of water resource projects. In: P.J. Brown (ed.), *Toward a technique for quantifying aesthetic quality of water resources*, PRWG120-2, Utah State University, Logan, Utah, pp. 6-12.
287. Boster, R.S. 1976. Methodologies for scenic assessment. In: Harper, D. and J. Warbach (eds.), *Proceedings of a Conference/Workshop: Visual Quality and the Coastal Zone*, College of Environmental Science and Forestry, State University of New York, Syracuse, New York, pp. 78-102.
288. Boster, R.S.; Daniel, T.C. 1972. Measuring public responses to vegetative management. *Arizona Watershed Symposium Proceedings* 16:38-43.
289. Brown, T.C.; Daniel, T.C. 1984. Modeling forest scenic beauty: Concepts and application to ponderosa pine. USDA Forest Service, Research Paper RM-256.
290. Brown, T.C.; Daniel, T.C. 1986. Predicting scenic beauty of timber stands. *Forest Science* 32:471-487.
291. Brown, T.C.; Daniel, T.C. 1987. Context effects in perceived environmental quality assessment; scene selection and landscape quality ratings. *Journal of Environmental Psychology* 7:233-250.
292. Daniel, T.C. 1976. Criteria for the development of perceived environmental quality indices. In: Craik, K.H. and E.H. Zube editors, *Perceived environmental quality: Research and Applications*. Plenum Press, New York, pp. 27-45.
293. Daniel, T.C. 1977a. Public perception based assessment of esthetics resources: The scenic beauty estimation method. In: *Proceedings, Environmental Psychology: Acid, Forest and Urban Regions*, reprint of papers read at Amer. Assoc. for Advance. of Sci., Denver, CO. Department of Psychology, University of Arizona, Tucson.
294. Daniel, T.C. 1977b. Measuring public preference for scenic quality. In: Thames, J.L. (ed.), *Disturbed land reclamation and use in the Southwest*. University of Arizona Press, Tucson, pp. 189-202.
295. Daniel, T.C. 1977c. Public perception based assessment of forest aesthetics. In: *Proceedings of the 1977 National Convention, Society of American Foresters*, Oct. 1977, pp. 323-327.
296. Daniel, T.C. 1979. Integration of esthetics evaluation with visual inventory and physical feature models. Final Report Prepared by the University of Arizona, Tucson, Arizona, Submitted to the USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.
297. Daniel, T.C.; Anderson, L.M.; Schroeder, H.W.; Wheeler, L., III. 1977. Mapping the scenic beauty of forest landscapes. *Leisure Science* 1:35-52.
298. Daniel, T.C.; Boster, R.S. 1976. Measuring landscape esthetics: The scenic beauty estimation method.

USDA Forest Service, Research Paper RM-167.

299. Daniel, T.C.; Wheeler, L.; Boster, R.S.; Best, R.R., Jr. 1973. Quantitative evaluation of landscapes: An application of signal detection analysis to forest management alternatives. *Management-Environment Systems* 3:330-344.

300. Richards, M. T. 1974. An activity topology for outdoor recreation in the Mogollon Rim area. MS Thesis, University of Arizona, Tucson, Arizona.

301. Richards, M.T.; Daniel, T.C. 1989. Recreation and esthetics management in southwestern ponderosa pine: Assessing research needs. In: Tecle, A., W.W. Covington, and R.H. Hamre, Technical Coordinators. 1989. Multi resource management of ponderosa pine forests. USDA Forest Service, General Technical Report RM-185. pp. 196-207.

302. Richards, M.T.; Daniel, T.C. 1991. Chapter 7. Management of recreation and esthetic values in southwestern ponderosa pine forest. In: Tecle, A. and W.W. Covington, Technical editors. 1991. Multi resource management of southwestern ponderosa pine forests: The status of knowledge. USDA Forest Service, Southwestern Region Report, pp. 315-360.

303. Richards, M.T.; King, D.A. 1977. Six recreation demand source populations in Arizona. USDC National Technical Information Service, PB-268-129.

304. Richards, M.T.; Kin & D.A.; Kurtz, W.B. 1977. Recreational visitors to the Mogollon Rim area of Arizona. USDC National Technical Information Service, PB-268-128.

305. Schroeder, H.W. 1977a. Predicting aesthetic evaluations for forest roads. MS Thesis, University of Arizona, Tucson, Arizona. 1977b. Predicting the aesthetic quality of forest roads. In: Proceedings, Environmental Psychology: Arid, Forest and Urban Regions. Reprint of papers read at Amer. Assoc. for Advance. of Sci., Denver, CO. Department of Psychology, University of Arizona, Tucson, Arizona.

307. Simpson, C.J.; Rosenthal, T.L.; Daniel, T.C.; White, G.M. 1976. Social influence variations in evaluating managed and unmanaged forest areas. *Journal of Applied Psychology* 61:759-765.

308. Sublette, W.J.; Martin, W.E. 1975. Outdoor recreation in the Salt-Verde Basin of central Arizona: Demand and values. University of Arizona Experiment Station, Technical Bulletin 218.

309. Thompson, A.E. 1972. Research in landscape architecture. *Progressive Agriculture in Arizona* 24:8-11,16.

310. Burford, C.L.; Mertes, J.D.; Jones, T.W. 1976. Technological and environmental planning consideration to minimize the environmental impact of transporting people and products through wildland areas: An overview. Department of Industrial Engineering and Park Administration, Landscape Architecture and Horticulture, Texas Technical University, Lubbock, Texas.

311. Burford, C.L.; Page, L.E.; Mertes, J.D. 1978. Development, trial application and evaluation of a transportation mode alternative analysis and specification selection procedure for use in wildland transportation planning. Texas Technical University, Lubbock, Texas, Final Report.

312. Covington, W.W.; Wood, D.B.; Tecle, A.; Fox, B.E. 1989. Current status of the TEAMS decision support system in forest plans. In: Tecle, A., W.W. Covington, and R.H. Hamre, Technical Coordinators. 1989. Multi resource management of ponderosa pine forests. USDA Forest Service, General Technical Report RM-185, pp. 221-227.

313. Ffolliott, P.E. 1995. Computer simulation techniques for planning and analysis of natural resource

management. In: Wang, L, and K. N. Brooks, eds. 1995. Soil and water conservation and environmental protection on the upper and middle reaches of the Changjiang River Basin. Chinese Forestry Press, Beijing, China, pp. 161-168. (Chinese)

314. Fox, B.E.; Wood, D.B.; Covington, W.W.; Tecle, A. 1989. The effect of planning unit size on implementing forest plans. In: Tecle, A., W.W. Covington, and R.H. Hamre, Technical Coordinators. 1989. Multi resource management of ponderosa pine forests. USDA Forest Service, General Technical Report RM-185, pp. 237-246.

315. Johnson, C.M. 1980. Computer techniques for land management planning. USDA Forest Service Research Note RM-387.

316. Eagan, D.E.; Larson, F.R. 1972. Proposed principles and standards for planning water and related land resources. In: Dynamics of Forest Policy Symposium, Colorado State University, Fort Collins, CO. pp. 70-78.

317. Levi, D. 1977. Managing resources in a simulated commons situation: The effects of goal conditions, orientation and experience. MS Thesis, University of Arizona, Tucson, Arizona.

318. McKee, M. 1979. Index utilization in natural resources planning: A review and evaluation of techniques. In: Proceedings of a workshop on Index Construction for Use in High Mountain Watershed Management, Utah Water Research Laboratory, Utah State University, UWRL/C-79/01, Logan.

319. McKee, M.; Simmons, R. 1979. A preliminary test and demonstration of the indifference-scaled factor profile technique in Forest Service regional planning. Utah State University Final Report, Logan, Utah. Prepared for USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Flagstaff, AZ.

320. Rasmussen, W. O.; Ffolliott, P.F.; Verma, T.R.; Thames, J.L. 1980. Environmental analysis for land use planning in the arid zones. In: Mann, H.S., ed. Arid zone research and development. Scientific Publishers, Jodhpur, India, pp. 69-73.

321. Rasmussen, W.O., Weisz, R.N.; Ffolliott, P.E.; Carder, D.R. 1980. Planning for forest roads: A computer-assisted procedure for selection of alternative corridors. *Journal of Environmental Management* 11:93-104.

322. Suhr, J.; Carder, D.R. 1979. A comparison of three index techniques in use in Forest Service planning. In: Proceedings of a Workshop on Index Construction for Use in High Mountain Watershed Management, Utah Water Research Lab., Utah State University, UWRL/G79/01, Logan.

323. Weisz, R.N.; Carder, D.R. 1975a. Development of land use planning and transportation planning systems for National Forest Management: A status overview. In: Meadows, J., B. Bare, K. Ware, C. Row, eds. Systems Analysis and Forest Resource Management, Society of American Foresters, Bethesda, MD. pp. 87-104.

324. Weisz, R.N.; Carder, D.R. 1975b. Development of land use planning and transportation planning systems for National Forests. In: Man, leisure, and wildlands: A complex interaction. Proceedings of First Eisenhower Consortium Research Symposium, Bulletin 1:143-156.

325. Wood, D.B.; Covington, W.W.; Tecle, A.; Fox, B.E.; Gordon, C. 1989. Use of a computer-aided decision support system in forest plan implementation. In: Tecle, A., W.W. Covington, and R.H. Hamre, Technical Coordinators. 1989. Multi resource management of ponderosa pine forests. USDA Forest Service, General Technical Report RM-185. pp. 228-236.

326. Clary, W. P. 1981. Grazing, natural resource policy, and biosphere reserves. In: Ffolliott, P.E, and G. Halffter, technical coordinators. Social and environmental consequences of natural resources policies, with



- special emphasis on biosphere reserves. USDA Forest Service, General Technical Report RM-88, pp. 21-23.
327. Cortner, H.J.; Berry, M.P. 1977. The Arizona Water Resources Committee: An historical perspective. Arizona Watershed Symposium Proceedings 21:5-15
328. Ffolliott, P.E. 1981. Integration of wildlife and other natural resources policies. In: Ffolliott, P.E., and G. Halffter, technical coordinators. Social and environmental consequences of natural resources policies, with special emphasis on biosphere reserves. USDA Forest Service, General Technical Report RM-88, pp. 24-25.
329. Ffolliott, P.E. 1983. Implications of snag policies on management of southwestern ponderosa pine forests. In: Davis, J.W., G.A. Goodwin, and R.A. Ockenfels, technical coordinators. Snag habitat management: Proceedings of the symposium. USDA Forest Service, General Technical Report RM-99, pp. 28-32.
330. Ffolliott, P.E.; Halffter, G. technical coordinators. 1981. Social and environmental consequences of natural resources policies, with special emphasis on biosphere reserves. USDA Forest Service, General Technical Report RM-88.
331. Halffter, G. 1981. Biosphere reserves: A new method of natural protection. In: Ffolliott, P.E., and G. Halffter, technical coordinators. Social and environmental consequences of natural resources policies, with special emphasis on biosphere reserves. USDA Forest Service, General Technical Report RM-88, pp. 3-6.
332. Nowakowski, N.A. 1980. Assessment of snag policies and their effects on timber harvests. MS Thesis, University of Arizona, Tucson, Arizona.
333. Stairs, G.R. 1981a. Evaluation of natural resources policy alternatives. In: Ffolliott, P.E., and G. Halffter, technical coordinators. Social and environmental consequences of natural resources policies, with special emphasis on biosphere reserves. USDA Forest Service, General Technical Report RM-88, pp. 37-40.
334. Stairs, G.R. 1981b. Impacts of policies on specific natural resources: Forest resources. In: Ffolliott, P.E., and G. Halffter, technical coordinators. Social and environmental consequences of natural resources policies, with special emphasis on biosphere reserves. USDA Forest Service, General Technical Report RM-88, pp. 7-9.
335. Stairs, G.R. 1981c. Social and environmental consequences of natural resources policies. In: Ffolliott, P.E., and G. Halffter, technical coordinators. Social and environmental consequences of natural resources policies, with special emphasis on biosphere reserves. USDA Forest Service, General Technical Report RM-88, pp. 1-2.
336. Bojorquez-Tapia, L.A.; Ffolliott, P.E.; Guertin, D.P. 1990. Herbage production-forest overstory relationships in two ponderosa pine forests. Journal of Range Management 43:25-28.
337. Clary, W.P. 1964. A method for predicting potential herbage yield on the Beaver Creek Pilot Watershed. In: Forage Plant Physiology and Soil-Range Relationships, American Society of Agronomy Special Publication No. 244- 250 5pp..
338. Clary, W.R. 1970. The relationship of herbage production on Springville soils to Utah juniper overstory and precipitation. American Society of Range Management, Abstract of Papers 23:69.
339. Clary, W.P. 1971. Effects of Utah juniper removal on herbage yields from Springville soils. Journal of Range Management 24:373-378.
340. Clary, W.P. 1972. Phenology, production, and water use of ecotypes of *Sitanion hystrix* (Nutt.) J. G. Smith. PhD Dissertation, Colorado State University, Fort Collins, Colorado.
341. Clary, W.P. 1974. Response of herbaceous vegetation to felling of alligator juniper. Journal of Range Management 27:387-389.

342. Clary, W.P. 1975a. Range management and its ecological basis in the ponderosa pine type of Arizona: The status-of-our-knowledge. USDA Forest Service, Research Paper RM-158.
343. Clary, W.P. 1975b. Ecotypic adaptation in *Sitanion hystrix*. Ecology 56:1407-1415.
344. Clary, W.P. 1978a. Arizona fescue mountain rangelands. Abstract of Papers, 1st International Rangeland Congress, Denver, Colorado, p. 22.
345. Clary, W.P. 1978b. Arizona-fescue mountain rangelands. In: Hyder, D.N., editor. Proceedings of the first international rangeland congress, Denver, Colorado, August 14-18, Society of Range Management, p. 205-207.
346. Clary, W.P. 1979. Variation in leaf anatomy and CO<sub>2</sub> assimilation in *Sitanion hystrix* ecotypes. Great Basin Naturalist 39:427-432.
347. Clary, W.P.; Ffolliott, P.E. 1966. Differences in herbage-timber relationships between thinned and unthinned ponderosa pine stands. USDA Forest Service, Research Note RM-74.
348. Clary, W.P.; Ffolliott, P.E. 1972. A selected and annotated bibliography of understory-overstory relationships. Arizona Agricultural Experiment Station, Technical Bulletin 198.
349. Clary, W.P.; Ffolliott, P.E.; Jameson, D.A. 1968a. Relationship of different forest floor layers to herbage production. USDA Forest Service, Research Note RM-123.
350. Clary, W.P.; Ffolliott, P.E.; Jameson, D.A. 1968b. Some characteristics of the forest floor under ponderosa pine in Arizona. USDA Forest Service, Research Note RM-127.
351. Clary, W.P.; Ffolliott, P.E.; Larson, E.R. 1978. Factors affecting forage consumption by cattle in Arizona ponderosa pine forests. Journal of Range Management 31:9-10.

352. Clary, W.P.; Ffolliott, RE; Zander, A.D. 1966. Grouping sites by soil management areas and topography. USDA Forest Service, Research Note RM-60.
353. Clary, W.P.; Grelen, H.E. 1978a. A comparison of beef gain potentials on cool semiarid and subtropical pine forest ranges. Abstracts of Papers. 1st International Rangeland Congress, Denver, Colorado, p. 55.
354. Clary, W.P.; Grelen, H.E. 1978b. A comparison of beef gain potentials on cool semiarid and subtropical pine forest ranges. In: Hyder, D.N., editor. Proceedings of the first international rangeland congress, Denver, Colorado, August 14-18, Society of Range Management, pp. 600-602.
355. Clary, W.P.; Jameson, D.A. 1980. Understory response after tree removal, herbicide application, and protection from grazing in Arizona pinyon-juniper. Abstracts of Papers. 33rd Annual Meeting, Society for Range Management, San Diego, California, p. 39.
356. Clary, W.P.; Jameson, D.A. 1981. Herbage production following tree and shrub removal in the pinyon-juniper type of Arizona. *Journal of Range Management* 34:109-113.
357. Clary, W.P.; Kruse, W.W. 1979. Phenology and rate of height growth of some forbs in the Southwest ponderosa pine type. USDA Forest Service, Research Note RM-376.
358. Clary, W.P.; Morrison, D.C. 1973. Large alligator junipers benefit early-spring forage. *Journal of Range Management* 26:70-71. -
359. Clary, W.P.; Pearson, H.A. 1969. Cattle preferences for forage species in northern Arizona. *Journal of Range Management* 22:114-116.
360. Clary, W.P.; Pearson, H.A. 1976. Herbage changes following thinning and grazing of a southwestern ponderosa pine stand. *Society of Range Management* 29:37. (Abstract)
361. Covington, W.W.; Fox, B.E. 1991. Chapter 4. Overstory-understory relationships in southwestern ponderosa pine. In: Tecle, A. and W.W. Covington, Technical editors. 1991. Multi resource management of southwestern ponderosa pine forests: The status of knowledge. USDA Forest Service, Southwest Region Report. pp. 121-161.
362. Ffolliott, PE 1983. Overstory-understory relationships: Southwest ponderosa pine. In: Bartlett, E. T. and D.R. Betters, eds. Overstory-understory relationships in western forests. Western Regional Research Publication 1:13-18.-
363. Ffolliott, P.E; Clary, W.P. 1972. A selected and annotated bibliography of understory-overstory vegetation relationships. Arizona Agricultural Experiment Station Technical Bulletin 198, 33 p.
364. Ffolliott, P.E; Clary, W.P. 1974. Predicting herbage production from forest growth in Arizona ponderosa pine. *Progressive Agriculture in Arizona* 26:3-5.
365. Ffolliott, P.E; Clary, W.R 1975. Differences in herbage-timber relationships on sedimentary and igneous soils in Arizona ponderosa pine stands. *Progressive Agriculture in Arizona*, 27:6-7.
366. Ffolliott, P.E; Clary, W.P. 1982. Understory-overstory vegetation relationships: An annotated bibliography. USDA Forest Service, General Technical Report INT-136.
367. Gallina, S.; Ffolliott, RE 1993. Overstory-understory relationships: Oak-pine forests of Sierra Madre Occidentalis, Mexico. In: Bartlett, E.T., and D.R. Betters, editors. Overstory-understory relationships in western forests. Western Regional Research Publication 1:13-20.

368. Jameson, D.A. 1965. Phenology of grasses of the northern Arizona pinyon-juniper type. USDA Forest Service, Research Note RM-47.
369. Jameson, D.A. 1966a. Competition in a blue grama broom snakeweed actinea community and responses to selective herbicides. *Journal of Range Management* 19:121-124.
370. Jameson, D.A. 1966b. Pinyon-juniper litter reduces growth of blue grama. *Journal of Range Management* 19:214-217.
371. Jameson, D.A. 1967. The relationship of tree overstory and herbaceous understory vegetation. *Journal of Range Management* 20:247-249.
372. Jameson, D.A. 1970. Juniper root competition reduces basal area of blue grama. *Journal of Range Management* 23:217-218.
373. Jameson, D.A. 1971. Optimum stand selection for juniper control on southwestern woodland ranges. *Journal of Range Management* 24:94-99.
374. Jameson, D.A.; Dodd, J.D. 1969. Herbage production differs with soil in the pinyon-juniper type of Arizona. USDA Forest Service, Research Note RM-131.
375. Kruse, W.H. 1970. Temperature and moisture stress affect germination of *Gutierrezia sarothrae*. *Journal of Range Management* 23:143-144.
376. Kruse, W.H. 1983. Herbage response to strip-cutting a ponderosa pine watershed in central Arizona. MS Thesis, Northern Arizona University, Flagstaff, Arizona.
377. Lavin, E; Johnsen, T.N., Jr. 1975. Forage shrub adaptation trials at three pinyon-juniper sites. USDA Agriculture Research Service, Publication W-29.
378. Pearson, H.A. 1964. Studies of forage digestibility under ponderosa pine stands. *Society of American Foresters Proceedings* 1964:71-73.
379. Pearson, H.A. 1965. Low-cost constant-temperature water bath. *Journal of Range Management* 18:149-150.
380. Pearson, H.A. 1967a. Effects of delays in inoculum collection on artificial rumen digestibilities. *Journal of Range Management* 20:332-333.
381. Pearson, H.A. 1967b. Cattle diet digestibilities determined from components. *Journal of Range Management* 20:405-406.
382. Pearson, H.A. 1967c. Phenology of Arizona fescue and mountain muhly in the northern Arizona ponderosa pine type. USDA Forest Service, Research Note RM-89.
383. Pearson, H.A. 1967d. Range animal nutrition. In: *Proceeding of the 5th West Texas Range Management Conference*, Texas Technical College, Lubbock, Special Report 3, pp. 66-82.
384. Pearson, H.A. 1970. Digestibility trials: In vitro techniques. In: *Range and wildlife habitat evaluations research symposium*, May, 1968, Flagstaff and Tempe, Arizona. USDA Miscellaneous Publication 1147, pp. 85-92.
385. Pearson, H.A. 1972. Estimating cattle gains from consumption of digestible forage on ponderosa pine range. *Journal of Range Management* 25(1):18-20.

386. Pearson, H.A. 1973. Calculating grazing intensity for maximum profit on ponderosa pine range in northern Arizona. *Journal of Range Management* 26(4):277-278.
387. Pearson, H.A.; Mann, J.E.; Howard, D.A. 1971. Timing use of cool- and warm- season grasses on pine ranges. *Journal of Range Management* 24:162-163.
388. Reid, E.H. 1964. Forage production in ponderosa pine forests. *Society of American Foresters Proceedings* 1964:61-64.
389. Reynolds, H.G. 1962. Some characteristics and uses of Arizona's major plant communities. *Journal of the Arizona Academy of Science* 2:62-71.
390. Avery, C.C.; Larson, E.R.; Schubert, G.H. 1976. Fifty-year records of virgin stand development in southwestern ponderosa pine. *USDA Forest Service, General Technical Report RM-22*.
391. Biondi, E. 1987. Influence of Gambel oak on radial growth of southwestern ponderosa pine: A dendrochronological study. MS Thesis, University of Arizona, Tucson, Arizona.
392. Biondi, F.; Klemmedson, J.O.; Kuehl, R.O. 1992a. Dendrochronology analysis of single-tree interactions in mixed pine-oak stands of central Arizona, U.S.A. *Forest Ecology and Management* 48:321-333.
393. Biondi, F.; Klemmedson, J.O.; Kuehl, R.O. 1992b. Tree-ring analysis of pine-oak interactions in central Arizona. In: *Proceedings of the International Dendrochronological Symposium, Lund, LUNDQUA Report 34, Sweden*.
394. Clary, W.P. 1987. Selection of silvicultural systems for forage production. In: *Ponderosa pine: the species and its management*. (Abstracts). September 29-October 1987, Spokane, Washington, United States Forest Service, Washington State University, University of Idaho, and Society of American Foresters, p. 30.
395. Clary, W.P. 1988. Silvicultural systems for forage production in ponderosa pine forests. In: Baumgartner, D.M. and J.E. Lotan, compilers. *Ponderosa pine the species and its management: symposium proceedings*, September 29-October 1, 1987, Spokane, Washington, United States Forest Service, Washington State University, University of Idaho, and Society of American Foresters. pp.185-191.
396. Clary, W.P.; Tiedemann, A.R. 1992. Ecology and values of Gambel oak woodlands. In: Ffolliott, P.F., G.J. Gottfried, D.A. Bennet, C. Hernandez, V. M. Hernandez C., A. Ortega-Rubio, and R.H. Hamre, Technical Coordinators. *Ecology and management of oak and associated woodlands: perspectives in the southwestern United States and northern Mexico*. April 27-30, 1992. Sierra Vista, Arizona, USDA Forest Service General Technical Report RM-218, pp. 87-95.
397. Ffolliott, P.E. 1981. Forest ecosystems in southwestern United States. In: Ffolliott, P.E, and S. Gallina, eds. *Deer biology, habitat requirements, and management in western North America*. Instituto de Ecologia, A. C., Mexico, D. E, Publication 9, pp. 57-76.
398. Ffolliott, P.F.; Baker, M.B., Jr. 1977. Characteristics of Arizona ponderosa pine stands on sandstone soils. *USDA Forest Service, General Technical Report RM-44*.
399. Ffolliott, P. F.; Gottfried, G.J. 1991. Natural tree regeneration after clearcutting in Arizona's ponderosa pine forests: Two long-term case studies. *USDA Forest Service, Research Note RM-507*.
400. Ffolliott, P.E; Solomon, R.M. 1976. Distributions of ponderosa pine forest densities on the Salt-Verde River Basin. *Agriculture Experiment Station, Technical Bulletin 227, University of Arizona, Tucson, Arizona*.

401. Ffolliott, P.F.; Thompson, J.R. 1976. Snow damage in Arizona ponderosa pine stands. USDA Forest Service, Research Note RM-322.
402. Ffolliott, P.E; Worley, D.P. 1973. Forest stocking equations: Their development and application. USDA Forest Service Research Paper RM-102, 8 p.
403. Gottfried, G. J.; Ffolliott, P.F. 1993. Silvicultural prescriptions for sustained productivity of the southwestern pinyon-juniper and encinal woodlands. In: Manzanilla, D. Shaw, C. Aguirre-Bravo, L. Iglesias Gutierrez, and R.H. Hamre, technical coordinators. Making sustainability operational: Fourth Mexico[U.S. symposium. USDA Forest Service, General Technical Report RM-240, pp. 185-192.
404. Gottfried, G.J.; Ffolliott, P.E 1995. Stand dynamics on upper elevation pinon- juniper watersheds at Beaver Creek, Arizona. In: Shaw, D.W., E.F. Aldon, and C. LoSapio, tech. coords. 1995. Desired future conditions for pinyon-juniper ecosystems. USDA Forest Service, General Technical Report RM-258, pp. 38-45.
405. Heidmann, L.J.; Larson, F.R.; Reidveld, W.J. 1977. Evaluation of ponderosa pine reforestation techniques in central Arizona. USDA Forest Service, Research Paper RM-190.
406. Jameson, D.A.; Johnsen, T.N., Jr. 1964. Ecology and control of alligator juniper. Weeds 12(2):140-142.
407. Johnsen, T.N., Jr.; Clary, W.P.; Ffolliott, P.E 1969. Gambel oak control on the Beaver Creek pilot watershed in Arizona. USDA Agriculture Research Service, ARS 34-104.
408. Larson, ER. 1980. Pinyon-juniper. In: Eyre, F.H., editor. Forest cover types of the United States and Canada. Washington D.C., Society of American Foresters, pp. 116117.
409. Larson, F.R.; Ffolliott, P.E; Clary, W.P. 1970. Distribution of dwarf mistletoe in ponderosa pine stands on the Beaver Creek watershed. USDA Forest Service, Research Note RM-175.
410. McCulloch, C.Y.; Wallmo, O.C.; Ffolliott, P.E 1965. Acom yield of Gambel oak in northern Arizona. USDA Forest Service, Research Note RM-48.
411. McMurtray, M. 1979. Effects of silvicultural practices on Arizona ponderosa pine stem quality. MS Thesis, University of Arizona, Tucson, Arizona.
412. Myers, C.A. 1962. Twenty-year growth of Utah juniper in Arizona. USDA Forest Service, Research Note RM-71.
413. Carder, D.R. 1976. Development and trial application of a prototype family of ecosystem component simulation models for land and water management. In: Earth Sciences Symposium Proceedings, Fresno, California, November 11, 1976.
414. Carder, D.R.; Larson, ER.; Rogers, J.J.; Rasmussen, W.O.; Ffolliott, P.E 1977. Ecosystem analysis for watershed management. Arizona Watershed Symposium 21:22-25.
415. Ffolliott, P.E 1990. Multiple resource simulation models. In: Wang, L. editor. Lecture notes for international training course on forest hydrology modeling. UNESCO, Beijing Forestry University, Beijing, People's Republic of China, pp. 37-41. (Chinese)
416. Ffolliott, P.E 1993. Hydrological and multi-resource simulation models: Applications in mountainous areas. In: Proceedings of the International Symposium on Hydrology of Mountainous Areas. National Institute of Hydrology, Shimla, India, May 28-30,1992, pp. 315-329.

417. Ffolliott, P.E; Guertin, D.P. 1988. YIELD II: An interactive computer model to simulate water yield in Engineering Laboratory, Hanover, New Hampshire, September 25-28, 1978, pp. 359-368. International Symposium on Modeling Agriculture, Forest, and Rangeland Hydrology. American Society of Agricultural Engineers, Chicago, Illinois, December 12-13, 1988, pp. 72-78.
419. Ffolliott, P.E; Guertin, D.P.; Fogel, M.M. 1990. An interactive computer model to simulate water quality of streamflow from forested watersheds in Arizona. In: Riggins, R.E., E.B. Jones, R. Singh, and P.A. Richard editors, Proceedings of the symposium on watershed planning and analysis in action. American Society of Civil Engineers, Durango, Colorado, July 9-11, 1990, pp. 285-292.
420. Ffolliott, P.E; Guertin, D.P.; Rasmussen, W.O. 1988a.
422. Ffolliott, P.E; Rasmussen, W.O. 1979a. An interactive model of snowpack accumulation and melt dynamics in mountainous areas. The framework of the models can also be applied in forest conditions. In: Colbeck, S. editor, Proceedings of a meeting on modeling snow cover runoff. U.S. Simulating the impacts of fire: A computer program.
423. Ffolliott, P.E; Rasmussen, W.O. 1979b. Use of remote sensing data to interactively simulate wildlife habitat quality. In: Berger, M. E., D. W. Cerny, M. Felcher, A. Marmelstein, G. A. Thorley, and G. Watson, eds. pp. 418. Ffolliott, P.F.; Guertin, D.P. 1990. Application of remote sensing data to wildlife management. The PECORA IV Symposium, Sioux Falls, South Dakota. In: Ffolliott, P.F., and D.P. Guertin, eds. Proceedings of a workshop: Forest hydrological resources in China, Scientific and Technical Series 3: 294-299.
424. Ffolliott, P. E; Rasmussen, W.O. 1983. Measurement and simulation of changes in timber quality features. In: Bell, J. E, and T. Atterbury. Proceedings of an international conference on renewable resources inventories for monitoring changes and trends. Society of American Foresters, Bethesda, MD, pp. 211-221.
425. Ffolliott, P.E; Rasmussen, W.O.; Guertin, D.P. 1987. Simulating the impacts of fire: A hydrologic component. Hydrology and Water Resources in Arizona and the Southwest 17:23-28.
426. Ffolliott, P.E; Rasmussen, W.O.; Guertin, D.P. 1988. A model of snowpack dynamics in forest openings. STAND: An interactive model to simulate the growth and yield of woodlands in the Southwest. In: Ek, A.R., S.R. Shifley, and T.E. Burk, tech. Coords. Forest growth and modeling prediction. USDA Forest Service, General Technical Report NC-120, pp. 968-975. Environmental Management 12:809-814. An analytical assessment. U.S. Department of State, Publication 9829, pp. 77-88.
427. Jetton, A.E. 1990. Vegetation management and water yield in a southwestern ponderosa pine watershed: An evaluation of three hydrologic simulation models. MS Thesis, University of Arizona, Tucson, Arizona.
428. Larson, E.R. 1975a. Simulating growth and management of ponderosa pine stands. PhD Dissertation, Colorado State University, Fort Collins, Colorado.
429. Larson, E.R. 1975b. Simulating growth and management of ponderosa pine stands. In: Meadows, J., B. Bare, K. Ware, and C. Row, editors. Systems Analysis and Forest Resources. Society of American Foresters, Bethesda, MD., pp. 211-221.
430. Larson, E.R. 1976. Simulator model use in determining output by alternatives. USDA Forest Service,

Region 3 Land Use Planning Symposium, Albuquerque, MN. 28 p.

431. Larson, ER.; Minor, 1983. AZPIPO: A simulator for growth and yield of ponderosa pine in Arizona. Arizona Forestry Notes No. 20, School of Forestry, Northern Arizona University.

432. Larson, ER.; Ffolliott, P.E.; Rasmussen, W.O.; Carder, D.R. 1979. Estimating impacts of silvicultural management practices on forest ecosystems. In: Best Management Practices for Agriculture and Silviculture, Proceedings of the 1978 Cornell Agriculture Waste Management Conference, pp. 281-294.

433. Li, R.M.; Simons, D.B.; Carder, D.R. 1976b. Computer simulation of storm water and sediment hydrographs from small watersheds. In: Proceedings of the 1976 Summer Computer Simulation Conference, Washington, D.C. 7 p.

434. Mattem, D.E. 1989. Hydrologic simulation of pinyon-juniper woodlands in Arizona. MS Thesis, University of Arizona, Tucson, Arizona.

435. McTague, J.P. 1991. Chapter 3. Tree growth and yield in southwestern ponderosa pine forests. In: Tecle, A. and W.W. Covington, Technical editors. 1991. Multi resource management of southwestern ponderosa pine forests: The status of knowledge. USDA Forest Service, Southwestern Region Report. pp. 24-120.

436. Rasmussen, W.O.; Ffolliott, P.F. 1979. An interactive model of suspended sediment yield on forested watersheds in central Arizona. Hydrology and Water Resources in Arizona and the Southwest 9:43-47.

437. Rasmussen, W.O.; Ffolliott, P.E. 1980. Prediction of the chemical quality of streamflow by an interactive computer model. Hydrology and Water Resources in Arizona and the Southwest 10:93-98.

438. Rasmussen, W.O.; Ffolliott, P.E. 1981a. Computer simulation problems for resource management instruction. Journal of Forestry 79:612.

439. Rasmussen, W.O.; Ffolliott, P.E. 1981b. Prediction of water yield using satellite imagery and a snowmelt simulation model. In: Deutsch, M, D. R. Wiesnet, and A. Rango, eds. Satellite hydrology. American Water Resources Association, Minneapolis, Minnesota, pp. 193-196.

440. Rasmussen, W.O.; Ffolliott, P.E. 1981c. Simulation of consequences of implementing alternative natural resources policies. In: Ffolliott, P.E, and G. Halffter, tech. coords. Social and environmental consequences of natural resources policies, with special emphasis on Biosphere Reserves: Proceedings of the international seminar. USDA Forest Service, General Technical Report RM88, pp. 41-43.

441. Rasmussen, W.O.; Ffolliott, P.E. 1983. A model to predict snag development. The Wildlife Society Bulletin 11:291-292.

442. Reich, B.M. 1971. Feasibility study of conceptual models for Beaver Creek hydrology. Unpublished Report, Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

443. Rogers, J.J. 1973. Design of a system for predicting effects of vegetation manipulation on water yield in the Salt-Verde Basin. PhD Dissertation, University of Arizona, Tucson, Arizona.

444. Rogers, J.J.; Baker, M.B., Jr.; Prosser, J.M.; Kulonowski, B. 1979. ECOSIM II-A system for simulating onsite effects of silvicultural management alternatives. A final report to the Southeastern Environmental Research Center, Office of Research and Development, U.S. Environmental Protection Agency.

445. Rogers, J.J.; Prosser, J.M.; Garrett, L.D. 1981. Modeling onsite Multi resource effects of silvicultural management prescriptions. In: Vodak, M.C., W.A. Leuschner, and D.I. Navon, eds. Proceedings of IUFRO



Forest Management Symposium, [Blacksburg, VA., August 18-20, 1980]. Publ. FWS-1-81, January, pp. 107-117.

446. Rogers, J.J.; Prosser, J.M.; Garrett, L.D. 1982.

ECOSIM: A prototype system for estimating Multi resource outputs under alternative forest management regimes. In: Corcoran, T. and W. Heij, co-editors, Proceedings IVII IUFRO World Congress, Working Party Planning and Control of Forest Operations S3.04.01. [Kyoto, Japan, Sept. 6-17, 1981]. Life Sci. and Agric. Exp. Stn., Univ. of Maine, Orono. Misc. Rep. 264. pp. 122-127.

447. Rupp, D.E. 1995. Spatially-varied, stochastic water yield modeling of an upland watershed. MS Thesis, Northern Arizona University, Flagstaff, Arizona.

448. Rupp, D.E.; Teclé, A. 1995. A stochastic model for simulating daily temperature and humidity on a ponderosa pine type watershed. *Hydrology and Water Resources in Arizona and the Southwest* 22-25:101-108.

449. Teclé, A.; Dykstra, D.P.; Covington, W.W.; and Garrett, L.D. 1990. Proposed methodology for soil loss prediction from southwestern forests. *Hydrology and Water Resources in Arizona and the Southwest*. 20:113-129.

450. Simons, D.B.; Li, R.M.; Eggert, K.G. 1977. Storm water and sediment runoff simulation for upland watersheds using analytical routing techniques. Vol. 1, Water Routing and Yield, Final Report CER 77-78, DBS-RML-KGE16 Pre models of radiation heat transfer between forest trees and snowpacks. *Agricultural Meteorology* 11:3-16.

451. Simons, D.B.; Li, R.M.; Fullerton, W.T.; Grindeland,

T.R. 1981. Storm water and sediment runoff simulation for a system of multiple watersheds. Volume 11. Sediment routing and yield. Final Report Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

452. Simons, D.B.; Li, R.M.; Spronk, B.E. 1978. Storm and water and sediment runoff simulation for a system of multiple watersheds. Vol. 1, Water Routing and Yield. Final Report CER77-78DBS-RML-BEST47 Prepared by Colorado State University, Fort Collins, Colorado, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

453. Simons D.B.; Shiao, L.Y.; Li, R.M.; Eggert, K.G. 1977. Storm water and sediment runoff simulation for upland watersheds using analytical routing techniques. Vol. II, Sediment Yield, Colorado State University, Report CER77- 78DBS-RML-KGE17. Prepared for USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

454. Solomon, R.M.; Ffolliott, R.F.; Baker, M.B., Jr.; Thompson, J.R. 1976. Computer simulation of snowmelt. USDA Forest Service, Research Paper RM-174.

455. Teclé, A.; Rupp, D.E. 1995. Stochastic, event-based, and spatial modelling of cold-season precipitation. In: Guy, B.T. and J. Bamard, editors. *Mountain Hydrology, Peaks and Valleys in Research and Applications*, May 16-19, 1995, Vancouver, B.C. Canada. pp. 171-182.

456. Trotta, R.D.; Rogers, J.J.; Vandivere, W.B. 1979. Impact of development on streamflows. *Hydrology and Water Resources in Arizona and the Southwest* 9:109-118.

457. Aul, J.S. 1975. Use of areal snow cover measurements to develop snowmelt-runoff relationships for Arizona. MS Thesis, University of Arizona, Tucson, Arizona.

458. Aul, J.S.; Ffolliott, R.E. 1975. Use of areal snow cover measurements from ERTS-1 imagery in snowmelt-runoff relationships in Arizona. In: Rango, A., editor. *Operational applications of satellite snowcover observa-*

tions. National Aeronautics and Space Administration, NASA SP-391, pp. 103-112.

459. Bohren, C.E 1973. Theory of radiation heat transfer between forest canopy and snowpack. In: Proceedings of Symposium on the Role of Snow and Ice on Hydrology, UNESCO, World Meteorological Organization and International Association of Hydrological Sciences, Banff, Alberta, Canada, June 1972, pp. 165- 173.

460. Bohren C.F.; Barkstrom, B.R. 1974. Theory of the optical properties of snow. *Journal of Geophysical Research* 79:4527-4535.

462. Delk, R. 1969. Snow distribution patterns under various stand densities of ponderosa pine. MS Thesis, University of Arizona, Tucson, Arizona.

463. Ffolliott, P.E 1970. Characterization of Arizona snowpack dynamics for prediction and management purposes. PhD Dissertation, University of Arizona, Tucson, Arizona.

464. Ffolliott, P.E 1983. Time-space effects of openings in Arizona forests on snowpacks. *Hydrology and Water Resources in Arizona and the Southwest* 13:17-20.

465. Ffolliott, P-E 1985. Snowpack density: An index of snowpack condition. *Hydrology and Water Resources in Arizona and the Southwest* 15:1-6.

466. Ffolliott, P.E 1986. Twenty-five years of snow research in Arizona: A preliminary report. *Hydrology and Water Resources in Arizona and the Southwest* 16:95-103.

467. Ffolliott, P.E 1993. Snowpack dynamics in mountainous areas: Research findings in the southwestern United States. In: Proceedings of the International Symposium on Hydrology of Mountainous Areas. National Institute of Hydrology, Shimla, India, May 28-30, 1992., pp. 129-139.

468. Ffolliott, P.E; Hansen, E.A. 1968. Observations of snowpack accumulation, melt, and runoff on a small Arizona watershed. USDA Forest Service, Research Note RM-124.

469. Ffolliott, P.F.; G.J. Gottfried, G.J.; Baker, M.B., Jr. 1989. Water yield from forest snowpack management: Research findings in Arizona and New Mexico. *Water Resources Research* 25:1999-2007.

470. Ffolliott, P.E; Hansen, E.A.; Zander, A.D. 1965. Snow in natural openings and adjacent ponderosa pine stands on the Beaver Creek watersheds. USDA Forest Service, Research Note RM-53.

471. Ffolliott, P.E; Thorud, D.B. 1969. Snowpack density, water content, and runoff on a small Arizona watershed. *Western Snow Conference* 37:12-18.

472. Ffolliott, P.E; Thorud, D.B. 1972. Use of forest attributes in snowpack inventory-prediction relationships for Arizona ponderosa pine. *Journal of Soil and Water Conservation* 27:109-111.

486. Nibler, G.J. 1973. The use of upper air data in the estimation of snow melt. MS Thesis, University of Arizona, Tucson, Arizona.
487. Solomon, R.M. 1974. An assessment of snowpack depletion-surface runoff relationships on forested watersheds. MS Thesis, University of Arizona, Tucson, Arizona.
488. Solomon, R.M.; Ffolliott, P.E; Baker, M.B., Jr.; Gottfried, G.J.; Thompson, J.R. 1975. Snowmelt runoff efficiencies on Arizona watersheds. Arizona Agricultural Experiment Station, Research Report 274.
489. Solomon, R.M.; Ffolliott, P.F.; Baker, M.B., Jr.; Thompson, J.R. 1976. Computer simulation of snowmelt. USDA Forest Service, Research Paper RM-174.
490. Solomon, R.M.; Ffolliott, P.E; Thorud, D.B. 1975. Characterization of snowmelt runoff efficiencies. In: Proceedings, Watershed Management Symposium, ASCE, Irrigation and Drainage Division [Logan, UT., Aug. 11-13, 1975], pp. 306-326.
491. Thorud, D.B.; Ffolliott, P.E 1971. Progress in developing forest management guidelines for increasing snowpack water yields. *Hydrology and Water Resources in Arizona and the Southwest* 1:291-300.
492. Thorud, D. B.; Ffolliott, P.F. 1972. Development of management guidelines for increasing snowpack water yields from ponderosa pine forests in Arizona. In: *National Symposium on Watershed in Transition*. American Water Resources Association and Colorado State University, Fort Collins, Colorado, June 19-21, 1971, pp. 171-173.
493. Thorud, D.B.; Ffolliott, P.E 1976. Arizona's frozen assets: Snowpack management. *Arizona Watershed Symposium Proceedings* 19:31-34.
494. Timmer, M.J. 1980. Snowpack dynamics of southwestern aspen forests. MS Thesis, University of Arizona, Tucson, Arizona.
495. Timmer, M.J.; Ffolliott, P.E; Baker, M.B., Jr. 1984. Snowpack dynamics in aspen stands near the San Francisco Mountains, Arizona. *Hydrology and Water Resources in Arizona and the Southwest* 14:51-55.
496. Tunnicliff, B.M. 1975. The historical potential of snowfall as a water resources inn Arizona. MS Thesis, University of Arizona, Tucson, Arizona.
497. Welch, B.W. 1975. Validation of snowpack inventory-prediction relationships in Arizona ponderosa pine forests. MS Thesis, University of Arizona, Tucson, Arizona.
498. Aldon, E.F. 1968. Moisture loss and weight of the forest floor under pole-size ponderosa pine stands. *Journal of Forestry* 66:70-71.
499. Anderson, T.C., Jr.; Williams, J.A.; Crezee, D.B. 1960. Soil management report for Beaver Creek Watershed. USDA Forest Service, Region 3, Coconino National Forest, 66 p.
500. Blecker, R.E 1969. Saturated flow of water through clay loam subsoil material of the Brolliar and Springerville soil series. In: Thames, J.L. 1969. A study to determine the hydrologic and physical properties of some Beaver Creek soils. Department of Watershed Management, University of Arizona, Tucson, Arizona. 330 p.
501. Clary, W.P.; Ffolliott, P.E 1969. Water holding capacity of ponderosa pine forest floor layers. *Journal of Soil and Water Conservation* 24:22-23.
502. Clary, W.P.; Ffolliott, RE; Zander, A.D. 1966. Grouping sites by soil management areas and topography.

USDA Forest Service, Research Note RM-60.

503. Ffolliott, P.E; Clary, W.P.; Baker, M.B., Jr. 1976. Characteristics of the forest floor on sandstone and alluvial soils in Arizona's ponderosa pine type. USDA Forest Service, Research Note RM-308.

504. Ffolliott, P.E; Clary, W.P.; Davis, J.R. 1968. Some characteristics of the forest floor under ponderosa pine in Arizona. USDA Forest Service, Research Note RM-127.

505. Ffolliott, P.E; Larson, E.R.; Thill, R.E. 1977. Some characteristics of Arizona's mixed conifer forest floor. USDA Forest Service, Research Note RM- 342.

506. Gam H.S. 1969. The volume-water content relationship of two Beaver Creek soils. In: Thames, J.L. 1969. A study to determine the hydrologic and physical properties of some Beaver Creek soils. Department of Watershed Management, University of Arizona, Tucson, Arizona. 330 p

507. Hendricks, D.M. 1979a. Chapter 3, The release of nutrients from parent materials as influenced by weathering. In: Klemmedson, J.O.; Hendricks, D.M. 1979. Study of nutrient and soil balance in ponderosa pine ecosystems in relation to stand composition and land treatment, Report Prepared by University of Arizona, Tucson, Arizona, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

508. Hendricks, D.M. 1979b. Chapter 6, Soil formation rates as related to forest watershed conditions. In: Klemmedson, J.O.; Hendricks, D.M. 1979. Study of nutrient and soil balance in ponderosa pine ecosystems in relation to stand composition and land treatment, Report Prepared by University of Arizona, Tucson, Arizona, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

509. Klemmedson J.O. 1979a. Chapter 2, Nutrient input by precipitation and the effect of precipitation on nutrient transfer by throughfall and stemflow. In: Klemmedson, J.O.; Hendricks, D.M. 1979. Study of nutrient and soil balance in ponderosa pine ecosystems in relation to stand composition and land treatment, Report Prepared by University of Arizona, Tucson, Arizona, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

510. Klemmedson, J.O. 1979b. Chapter 4, Transfer of nutrients from the standing forest to the forest floor by litterfall. In: Klemmedson, J.O.; Hendricks, D.M. 1979. Study of nutrient and soil balance in ponderosa pine ecosystems in relation to stand composition and land treatment, Report Prepared by University of Arizona, Tucson, Arizona, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

511. Klemmedson, J.O. 1979c. Chapter 5, Decomposition of forest floor and transfer of nutrients to the soil. In: Klemmedson, J.O.; Hendricks, D.M. 1979. Study of nutrient and soil balance in ponderosa pine ecosystems in relation to stand composition and land treatment, Report Prepared by University of Arizona, Tucson, Arizona, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

512. Klemmedson, J.O. 1981. Chapter 4 (revision), Transfer of nutrients from the standing forest to the forest floor by litterfall. In: Klemmedson, J.O.; Hendricks, D.M. 1979. Study of nutrient and soil balance in ponderosa pine ecosystems in relation to stand composition and land treatment, Report Prepared by University of Arizona, Tucson, Arizona, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

513. Klemmedson, J.O. 1987. Influence of oak in pine forests of central Arizona on selected nutrients of forest floor and soil. Soil Science Society of America 51:1623-1628.

514. Klemmedson, J.O.; Hendricks, D.M. 1979. Study of nutrient and soil balance in ponderosa pine ecosystems in relation to stand composition and land treatment. Final Report Prepared by University of Arizona, Tucson, Arizona, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

515. Klemmedson, J.O.; Meier, C.E.; Campbell, R.E. 1985. Needle decomposition and nutrient release in pon-

derosa pine ecosystems. Forest Science 31:647-660.

516. Klemmedson, J.O.; Meier, C.E.; Campbell, R.E. 1990. Litter fall transfers of dry matter and nutrients in ponderosa pine stands. Canadian journal of Forest Research 20:1105-1115.

517. Lefevre, R.E. 1974. Effects of Gambel oak on the characteristics of litter in a ponderosa pine forest. MS Thesis, University of Arizona, Tucson, Arizona.

518. Lefevre, R.E.; Klemmedson, J.O. 1980. Effect of Gambel oak on forest floor of a ponderosa pine forest. Soil Science Society of America 44:842-846.

519. Rector, J.R. 1969a. Infiltration characteristics of soils in the Beaver Creek area of north central Arizona. MS Thesis, University of Arizona, Tucson, Arizona.

520. Rector, J.R. 1969b. Infiltration characteristics of soils in the Beaver Creek area of north central Arizona. In: Thames, J.L. 1969. A study to determine the hydrologic and physical properties of some Beaver Creek soils. Department of Watershed Management, University of Arizona, Tucson, Arizona. 330 p.

521. Ryan, J.A. 1969a. Sampling study of the physical properties of several soil types in northern Arizona. MS Thesis, University of Arizona, Tucson, Arizona.

522. Ryan, J.A. 1969b. Sampling study of the physical properties of several soil types in northern Arizona. In: Thames, J.L. 1969. A study to determine the hydrologic and physical properties of some Beaver Creek soils. Department of Watershed Management, University of Arizona, Tucson, Arizona. 330 p.

523. Santa Cruz, R.M. 1969. Analysis of soil profile descriptions. In: Thames, J.L. 1969. A study to determine the hydrologic and physical properties of some Beaver Creek soils. Department of Watershed Management, University of Arizona, Tucson, Arizona. 330 p.

524. Scholl, D.G. 1971. Soil wettability in Utah juniper stands. Soil Science Society of America Proceedings 35:344-345.

525. Skau, C.M. 1964. Soil water storage under natural and cleared stands of alligator and Utah juniper in northern Arizona. USDA Forest Service Research Note RM-24.

526. Storey, G.E. 1968. A mycological study of some soils of the Arizona pinyon- juniper type. Arizona Forestry Notes No. 3, School of Forestry, Northern Arizona University, Flagstaff, Arizona.

527. Story, M.T. 1974. Nitrogen fixation by *Ceanothus fenderi* and *Lupinus argenteus* as a function of parent material and vegetal cover. MS Thesis, University of Arizona, Tucson, Arizona.

528. Thames, J.L. 1969a. A study to determine the hydrologic and physical properties of some Beaver Creek soils. Department of Watershed Management, University of Arizona, Tucson, Arizona. 330 p.

529. Thames, J.L. 1969b. The size distribution of surface rocks on several Beaver Creek watersheds. In: Thames, J.L. 1969. A study to determine the hydrologic and physical properties of some Beaver Creek soils. Department of Watershed Management, University of Arizona, Tucson, Arizona. 330 p.

530. Thames, J.L. 1969c. A watershed soil sampling guide. In: Thames, J.L. 1969. A study to determine the hydrologic and physical properties of some Beaver Creek soils. Department of Watershed Management, University of Arizona, Tucson, Arizona. 330 p.

531. Welch, T.G. 1973. Distribution of nitrogen and carbon in ponderosa pine ecosystems as a function of parent

material. PhD Dissertation, University of Arizona, Tucson, Arizona.

532. Williams, J.A. 1969. Soil profile descriptions. In:Thames, J.L. 1969. A study to determine the hydrologic and physical properties of some Beaver Creek soils. Department of Watershed, University of Arizona, Tucson, Arizona. 330 p.

533. Williams, J.A.; Anderson, T.C., Jr. 1967. Soil survey of Beaver Creek area, Arizona. USDA Forest Service, Soil Conservation Service, and Arizona Agriculture Experiment Station.

534. Avery, C.C. 1981. Water quality constrains on the use of recreational impoundment in northern Arizona. Eisenhower Consortium Grant 262.

535. Brown, C.C. 1978. Nutrient analysis of precipitation on two sites in northern Arizona. MS Thesis, Northern Arizona University, Flagstaff, Arizona.

536. Ffolliott, RE 1989. Water quality of streamflow from forested southwestern watersheds. In: Preconference Proceedings of the Advances in Management of Southwestern Watersheds. American Water Resources Association, New Mexico Section, Socorro, New Mexico, September 14-15, 1989, p. 4. (Abstract)

537. Ffolliott, RE 1990. Water quality of streamflow from selected forested watershed in Arizona. Hydrology and Water Resources in Arizona and the Southwest 19:1-5.

538. Ffolliott, RE 1993. Acidity of Arizona's snowpacks. Journal of the Arizona-Nevada Academy of Science. Proceedings Supplement 28:48. (Abstract)

539. Ffolliott, P.E 1994. Concentrations of chemical constituents of Arizona's snowpack and snowmelt streamflow: A comparison. Journal of the Arizona-Nevada Academy of Science, Proceedings Supplement 29. (Abstract)

540. Ffolliott, P.E; Lopes, V.L. 1993. Acidity and chemistry of Arizona's snowpacks. In: Allen, R. G., and C. M. U. Neale, editors. Proceedings of the National Conference on Management of Irrigation and Drainage Systems: Integrated perspectives. American Society of Civil Engineers, Park City, Utah, July 21-23,1993, pp. 305-310.

541. Gosz, J.R. 1975. Stream chemistry as a tool in evaluating ski area development. Eisenhower Consortium Bulletin No. 1, Man, Leisure and Wildlands: A complex interaction. First Eisenhower Consortium Research Symposium, Vail, Colorado, pp. 183-194.

542. Gosz, J.R.; White, C.S.; Ffolliott, P.E 1980. Nutrient and heavy metal transport capabilities of sediment. Water Resources Bulletin 16:927-933.

543. Gregory, P.W. 1976. The water quality of streamflow from ponderosa pine forests on sedimentary soils. MS Thesis, University of Arizona, Tucson, Arizona.

544. Gregory, P.W.; Ffolliott, P.E 1976. Water quality of streamflow from forested watersheds on sedimentary soils. Hydrology and Water Resources in Arizona and the Southwest 6:93-95.

545. Johnsen, T.N., Jr. 1980. Picloram in water and soil from a semiarid pinyon- juniper watershed. Journal of Environmental Quality 9:601-605.

546. Klemmedson, J.O.; Meier, C.E.; Campbell, R.E.; Marx, D.B. 1983. Effect of stand composition and season on chemistry of throughfall and streamflow of ponderosa pine forests. Forest Science 29:871-887.

547. Oakley, S.M.; Segal, B.A.; Johnson, R.M. 1977. Chemical and microbiological characteristics of two rec-

reation oriented, oligotrophic mountain lakes. *Journal of Arizona Academy of Science* 12:36-46.

548. Tecle, A. 1991. Chapter 6. Water quality in southwestern ponderosa pine forests. In: Tecle, A. and W.W. Covington, Technical editors. 1991. *Multiresource management of southwestern ponderosa pine forests: The status of knowledge*. USDA Forest Service, Southwest Region Report, pp. 273-314

549. US Environmental Protection Agency. 1977. *Nonpoint water quality modeling in wildland management: A state-of-the-art assessment*. USDA Forest Service, Interagency Agreement No. EPA-1AG-D5-0660, Ecological Research Series No. EPA-600/3-77-036 Washington, D.C.

550. Affleck, R.S. 1975. *Potential for water yield improvement in Arizona through riparian vegetation management*. PhD Dissertation, University of Arizona, Tucson, Arizona.

551. Arizona Water Resources Committee. 1965. *The Arizona watershed program of the United States Department of Agriculture, Forest Service*. Arizona Water Resources Committee, Phoenix, Arizona.

552. Arizona Water Resources Committee. 1974. *More water for Arizona*. Arizona Water Resources Committee, Phoenix, Arizona.

553. Baker, M.B., Jr. 1982. Changes in streamflow in an herbicide-treated pinyon-juniper watershed in Arizona. *Hydrology and Water Resources in Arizona and the Southwest* 12:19-25.

554. Baker, M.B., Jr. 1983. Influence of slash windrows on streamflow. *Hydrology and Water Resources in Arizona and the Southwest* 13:21-25.

555. Baker, M.B., Jr. 1984. Changes in streamflow in an herbicide-treated pinyon-juniper watershed in Arizona. *Water Resources Research* 20:1639-1642.

556. Baker, M.B., Jr. 1986a. Effects of ponderosa pine treatments on water yield in Arizona. *Water Resources Research* 22:67-73.

557. Baker, M.B., Jr. 1986b. Water yield from treatment of ponderosa pine. In: *30th Annual Arizona Water Symposium Proceedings* 30:27-38.

558. Baker, M.B., Jr. 1988. Selection of silvicultural systems for water. In: Baumgartner, D.M., and J.E. Lotan, editors. *Ponderosa pine: The species and its management*. Symposium proceedings, Spokane, Washington, September 29-October 1, pp. 201-211.

559. Brown, H.E. 1970. Status of pilot watershed studies in Arizona. *American Society of Civil Engineers, Journal of Irrigation and Drainage Division* 96(IR1):11-23.

560. Brown, T.C.; Fogel, M.M. 1987. Use of streamflow increases from vegetation management in the Verde River Basin. *Water Resources Bulletin* 23:1149-1160.

561. Ffolliott, P.E. 1974a. Potentials for water yield improvement by vegetation management in Arizona. *Arizona Watershed Symposium Proceedings* 18:47-51.

562. Ffolliott, P.E. 1974b. Water yield improvement opportunities on Arizona's grassland and desert shrub ranges. *Arizona Watershed Symposium Proceedings* 18:37-39.

563. Ffolliott, P.E. 1985. Vegetation management and water yields-possibilities and limitations. In: Kaul, O.N., S.P. Banerjee, and A.C. Gupta, editors. *Proceedings of National Seminar on Watershed Management*. National Institute of Hydrology, New Forest, Dehradun, India., pp. 43-49.

564. Ffolliott, P.E; Brooks, K.N. 1988. Opportunities for enhancing water yield, quality, and distribution in the Mountain West. In: Schmidt, W.C., compiler. Proceedings-future forests of the Mountain West. USDA Forest Service, General Technical Report INT-243, pp. 5@.
565. Ffolliott, P. E; Fogel, M.M. 1986. Evaluation of water yield improvement programs: A methodology. First Water Resources Research Conference, Water Resources Research Center, University of Arizona, Tucson, Arizona, p.1. (Abstract)
566. Ffolliott, RE; Fogel, M.M. 1987. Potential for increasing water yields to active management areas through vegetation management. Arizona Water Symposium 30:73-79.
567. Ffolliott, P.E; Lopes, V.L. 1993. Opportunities for water yield improvement in dryland regions: A review of catchment experiments. In: Castillo, GJ., M. Tiscareno L., and I. Sanchez C., editors. Proceedings of the First International Seminar of Watershed Management. University of Sonora, Hermosillo, Mexico, pp. 24-29.
568. Ffolliott, P.E; Thorud, D.B. 1974. Vegetation management for increased water yield in Arizona. Arizona Agricultural Experiment Station, Technical Bulletin 215.
569. Ffolliott, P.E; Thorud, D.B. 1975a. Vegetation management for water and range management. In: Proceedings, Watershed Management Symposium, ASCE Irrigation and Drainage Division Logan, Utah, pp. 249-266.
570. Ffolliott, P.E; Thorud, D.B. 1975b. Water yield improvement by vegetation management focus in Arizona. U.S. Department of Commerce, National Technical Information Service PB-246 056.
571. Ffolliott, P.E; Thorud, D.B. 1976. Water yield improvement: State-of-the-art. In: Proceedings of the Earth Science Symposium. USDA Forest Service, Region Five, Fresno, California, pp. 1-12.
572. Ffolliott, RE; Thorud, D.B. 1977. Water yield improvement by vegetation management. Water Resources Bulletin 13:563-571.
573. Ffolliott, P.E; Thorud, D.B. 1984. Water yield by vegetation management in the southwestern United States. In: Proceedings of the Eighth World Forestry Congress, Forestry for Food, Jakarta, Indonesia, October 16-28, 1978,3:299-308.
574. Ffolliott, P.F.; Fogel, M.M.; Sikka, A. 1988. Impacts of upstream vegetative management on water yield. In: Proceedings of Seminar on Environmental Considerations in Planning of Water Resources Projects. National Institute of Hydrology, Roorkee, U.P., India, pp. III-9-111-19.
575. Hassell, M.J. 1976. Forest Service's role in Arizona's water future. Arizona Watershed Symposium Proceedings 20:40-42.
576. Hibbert, A.R. 1979. Managing vegetation to increase flow in the Colorado River Basin. USDA Forest Service, General Technical Report RM-66.
577. Hurst, W.D. 1974. The application of water yield research to the National Forests of the southwest. Arizona Watershed Symposium Proceedings 18:43-46.
578. Price, R. 1967. Possibilities of increasing streamflow from forest and range watersheds by manipulating the vegetative cover-the Beaver Creek Pilot Watershed Evaluation Study. In: Proceedings of the International Union of Forestry Research Organization XIV. IUFROCongress, Vol. I, Section 01-02-11, pp. 487-504.
579. Reynolds, H.G. 1961. Vegetation management for water yield in the Southwest. New Mexico Water Conference Proceedings 5:21-33.



580. Aldon, E.F. 1960. Research in the ponderosa pine type. In: Watershed management research in Arizona, progress report, 1959. USDA Forest Service, pp. 17-24.
581. Arizona State Land Department and the Arizona Water Resources Committee. 1965. The Arizona watershed program (brochure).
582. Brooks, K.N.; Ffolliott, P.F.; Thames, J.L. 1983. Principles and concepts of watershed management. In: Proceedings of a National Symposium on Soil and Water Conservation, Bangkok, Thailand, June 23-27, 1982, pp. 226- 234. (Thai)
583. Brown, H.E. 1971. Evaluating watershed management alternatives. American Society of Civil Engineers, journal of Irrigation and Drainage Division 97(1R1): 93-100.
584. Carder, D.R. 1976. Woods Canyon: A large scale watershed management experiment: An explanation and interim report. Arizona Watershed Symposium Proceedings 19:43-46.
585. Carder, D.R. 1977. Multiresource management research in the Southwest- The Beaver Creek Program. journal of Forestry 75:582-584.
586. Ffolliott, P.F. 1980. UNESCO's Man and the Biosphere Program: Interdisciplinary and international collaboration on environmental research in temperate forests. In: Abstracts of papers. The 140th National Meeting of the American Association for the Advancement of Science, San Francisco, California, AAAS Publication 80-2, p. 33. (Abstract)
587. Ffolliott, P.F. 1981. Integrated upland watershed management in the southwestern United States. journal of Indian Association of Hydrologists 5:8-13.
588. Ffolliott, P-F 1985a. Multiple use implications of watershed management. In: Easter, K.W., and M.M. Hufschmidt, eds. Integrated watershed management research for developing countries: Workshop report. Environment and Policy Institute, East-West Center, Honolulu, Hawaii, pp. 26-27. (Abstract)
589. Ffolliott, P.F. 1995b. The Salt River Project: A case study of river basin development and management in the United States. In: Papers for the Seminar on Chiangjiang Water and Soil Conservation and Environmental Protection, Beijing Forestry University, Beijing, China, pp. 94-60. (Chinese)
590. Ffolliott, P.F.; Brooks, K.N. 1985a. Current research trends in watershed management in the United States and several other countries. In: Kaul, O.N., S.P. Banerjee, and A.C. Gupta, eds. Proceedings of National Seminar on Watershed Management. National Institute of Hydrology, New Forest, Dehradun, India, pp. 217-223.
591. Garrett, L.D.; Covington, W.W.; Tecle, A. 1989. Research needs in the Southwest ponderosa pine type. In: Tecle, A., W.W. Covington, and R.H. Hamre, Technical Coordinators. 1989. Multiresource management of ponderosa pine forests. USDA Forest Service, General Technical Report RM-185. pp. 6-13.
592. Kennedy, R.H. 1959. National Forest watershed projects in Arizona. Arizona Watershed Symposium Proceedings 3:51-62.
593. Lloyd, R.D. 1966. Beaver Creek pilot watershed evaluation project. USDA Forest Service, Miscellaneous Report.
594. Piatt, J.R.; Krause, P.D. 1974. Road and site characteristics that influence road salt distribution and damage to roadside Aspen trees. Water, Air, and Soil Pollution 3:301-304.

595. Price, R. 1958. Watershed management research in the Southwest (A literature review). In: American Forestry Association's 83rd Annual Meeting, October 27-30, Tucson, Arizona.
596. Price, R. 1976. History of Forest Service Research in the Central and southern Rocky Mountain Regions, 1908-1975. USDA Forest Service General Technical Report RM-27.
597. Price, R.; Hoover, M.D. 1957. Watershed management research in Arizona conducted by the Forest Service. Arizona Watershed Symposium Proceedings 1:5-10.
598. Reynolds, H.G. 1960a. Current watershed management research by the U.S. Forest Service in Arizona. Arizona Watershed Symposium Proceedings 3:63-93.
599. Reynolds, H.G. 1960b. Scope of current watershed management research in Arizona. In: Watershed management research in Arizona, progress report, 1959, pp. 1-4.
600. Reynolds, H.G. 1960c. Watershed management research in Arizona and New Mexico. Journal of Forestry 58:275-278.
601. Skau, C.M. 1960. Watershed management research in the pinyon-juniper type. In: Watershed management research in Arizona, progress report, 1959, pp. 25-29.
602. Thorud, D.B.; Ffolliott, P.E. 1972. Development of management guidelines for increasing snowpack water yields from ponderosa pine forests in Arizona. In: National symposium on watershed in transition. American Water Resources Association and Colorado State University, Fort Collins, Colorado, June 19-21, 1971, pp. 171-173.
603. USDA Forest Service. 1977a. The Beaver Creek Program. Advancing forest and range resource management. USDA Forest Service, Brochure English and Spanish Version.
604. USDA Forest Service. 1977b. Application for designation of the Beaver Creek Watershed as a Biosphere Reserve. Project 8 Man and the Biosphere Program UNESCO. p. 25.
605. Wilm, H.G. 1967. The Arizona watershed program as it enters into its second decade. Arizona Watershed Symposium Proceedings 10:9-11.
606. Balda, R.P. 1975. Vegetation structure and breeding bird diversity. In: Smith, D. R., technical coordinator. Proceedings of Symposium on Management of Forest and Range Habitats for Nongame Birds. Tucson, Arizona. USDA Forest Service, General Technical Report WO-1, pp. 59-80.
607. Clary, W.P. 1972. A treatment prescription for improving big game habitat in ponderosa pine forests. Arizona Watershed Symposium Proceedings 16:25-28.
608. Clary, W.P. 1990. Overview of ponderosa pinebunchgrass ecology and wildlife enhancement with emphasis on southwestern United States. In: Fisser, H.G., editor. Proceedings of the sixteenth Wyoming Shrub Ecology Workshop, May 26-27, 1987, Sundance, Wyoming. Laramie, Wyoming: Division of Range Management and University of Wyoming, pp. 11-21.
609. Clary, W.P.; Larson, E.R. 1971. Elk and deer use are related to food sources in Arizona ponderosa pine. USDA Forest Service, Research Note RM-202.
610. Costa, R. 1976. Cottontail (*Sylvilagus auduboni*) response to ponderosa pine management. MS Thesis, University of Arizona, Tucson.
611. Costa, R.; Ffolliott, R.E.; Pafton, D.R. 1976. Cottontail response to forest management in southwestern

ponderosa pine. USDA Forest Service, Research Note RM-330.

612. Cunningham, J.B.; Balda, R.P.; Gaud, W.S. 1980. Selection and use of snags by secondary cavity-nesting birds of the ponderosa pine forest. USDA Forest Service Research Paper RM-222.

613. Ezcurra, E.; Gallina, S.; Ffolliott, P.F. 1980. Manejocombinado del venado y el ganado en el none de Mexico. *Rangelands* 2:208-209. (Spanish)

614. Ffolliott, P.E 1976. An assessment of abert squirrel and cottontail activities on Beaver Creek Watersheds. Final Report Prepared by University of Arizona, Tucson, Arizona, Submitted to the Rocky Mountain Forest and Range Experiment Station, Flagstaff, Arizona.

615. Ffolliott, P.E 1981. Integrating deer management with the multiple use concept. In: Ffolliott, P.E, and S. Gallina, eds. *Deer biology, habitat requirements, and management in westem North America*. Instituto de Ecologia, A. C., Mexico, D. F., Publication 9, pp. 181-192.

616. Ffolliott, P.E 1990. Small game habitat use in southwestem ponderosa pine forests. In: Krausman, P., and N.S. Smith, eds. *Managing wildlife in the southwest: Proceedings of the symposium*, Tucson, Arizona, October 16-18, 1990, Arizona Chapter, The Wildlife Society, Phoenix, Arizona, pp. 107-117.

617. Ffolliott, P.E; Clary, W.P.; Larson, ER. 1976. Observations of beaver activity in an extreme environment. *The Southwestem Naturalist* 21:131-133.

618. Ffolliott, P.E; Patton, D.R. 1975. Production-rating functions for Abert squirrels in southwestem ponderosa pine. *Wildlife Society Bulletin*, 3:162-165.

619. Ffolliott, P.E; Patton, D.R. 1978. Abert squirrel use of ponderosa pine as feed trees. USDA Forest Service, Research Note RM-362,4 p.

620. Ffolliott, P.E; Thill, R.E.; Clary, W.P.; Larson, ER. 1977. Animal use of ponderosa pine forest openings. *journal of Wildlife Management* 41:782-784.

621. Gallina, S.; Ezcurra, E. 1981. Wildlife management: White-tailed deer in La Michila Biosphere Reserve. In: Ffolliott, P.E, and G. Halffter, technical coordinators. *Social and environmental consequences of natural resources policies, with special emphasis on biosphere reserves*. USDA Forest Service, General Technical Report RM-88, pp. 26-28.

622. Goodwin, J.G. 1975. Population densities and food selection of small rodents in Arizona ponderosa pine forests. MS Thesis, University of Arizona, Tucson, Arizona.

623. Goodwin, J.G.; Hungerford, C.R. 1979. Rodent population densities and food habitats in Arizona ponderosa pine forests. USDA Forest Service, Research Paper RM-214.

624. Hungerford, C.R.; Burke, M.D.; Ffolliott, P.E 1981. Biology and population dynamics of mule deer in southwestem United States. In: Ffolliott, P.E, and S. Gallina, eds. *Deer biology, habitat requirements, and management in western North America*. Instituto de Ecologia, A.C., Mexico, D. F., Publication 9, pp. 109-132.

625. Kruse, W.H. 1972. Effects of wildfire on elk and deer use of a ponderosa pine forest. USDA Forest Service, Research Note RM-226.

626. Kruse, W.H.; Balda, R.P.; Simon, M.J.; Macrander, A.M.; Johnson, C.D. 1979. Community development in two adjacent pinyon-juniper eradication areas twentyfive years after treatment. *journal of Environmental Management* 8:237-247.

627. Larson, F.R.; Ffolliott, P.F.; Clary, W.R 1986. Managing wildlife habitat-in southwestern ponderosa pine forests, diverse treatments are the key. *Journal of Forestry* 84(3):40-41.
628. McCuHodi, C.Y. 1982. Watershed and game management. *Arizona Watershed Symposium Proceedings* 6:25-27.
629. McCulloch, C.Y. 1978. Statewide deer food preferences. Arizona Game and Fish Department, Completion Report, Arizona Federal Aid Project W-78-R; WP4, J15, Phoenix, Arizona.
630. Neff, D.J. 1968. Habitat manipulation on pine and juniper watersheds. Arizona Game and Fish Department, Completion Report, Arizona Federal Aid Project W-78-R-12; WP4, J14, Phoenix, Arizona.
631. Neff, D.J. 1972. Responses of deer and elk to Beaver Creek watershed treatments. *Arizona Watershed Symposium* 16:18-24.
632. Neff, D.J. 1973. Effect of watershed treatment on deer and elk use. Arizona Game and Fish Department, Final Report, Arizona Federal Aid Project W-78-R-18; WP4, J5, Phoenix, Arizona, 9 pp.
633. Neff, D.J. 1974a. Behavior of deer and elk in relation to watershed treatments. Arizona Game and Fish Department, Final Report, Arizona Federal Aid Project W-78-R-18; WP4, J14, Phoenix, Arizona, 22 pp.
634. Neff, D.J. 1974b. Forage preferences of trained mule deer on the Beaver Creek watersheds. Arizona Game and Fish Department, Special Report No 4. Arizona Federal Aid Project W-78-R, 61 pp.
635. Neff, D.J. 1980a. Effects of watershed treatments on deer and elk range use. Arizona Game and Fish Department, Final Report. Arizona Federal Aid Project W-78R; WP4, JS, Phoenix, Arizona, 37 pp.
636. Neff, D.J. 1980b. Occurrence of game forage plants on experimental watersheds. Arizona Game and Fish Department, Final Report. Arizona Federal Aid Project W-78-R, Work Plan 4, J13. 41 pp.
637. Neff, D.J.; Wallmo, O.C.; Morrison, D.C. 1965. A determination of defecation rate of elk. *Journal of Wildlife Management* 29:406-407.
638. Neff, D. J.; McCulloch, C.Y.; Brown, D.E.; Lowe, C.H.; Barstad, J.E 1979. Forest, range, and watershed management for enhanced wildlife habitat in Arizona. Arizona Game and Fish Department, Special Report No. 7.
639. Patton, D.R. 1974a. Characteristics of ponderosa pine stands selected by the Abert's squirrel for cover. PhD Dissertation, University of Arizona, Tucson, Arizona.
640. Patton, D.R. 1974b. Estimating food consumption from twigs clipped by the Abert squirrel. *USDA Forest Service Research Note* RM-272.
641. Patton, D.R. 1975a. Nest use and home range of three Abert squirrels as determined by radio tracking. *USDA Forest Service Research Note* RM-281.
642. Patton, D.R. 1975b. Abert squirrel cover requirements in southwestern ponderosa pine. *USDA Forest Service, Research Paper* RM-145.
643. Patton, D.R. 1977. Managing southwestern ponderosa pine for the Abert squirrel. *Journal of Forestry* 25(5):265-268.
644. Patton, D.R. 1984. A model to evaluate Abert squirrel habitat in uneven-aged ponderosa pine. *Wildlife Society Bulletin* 12(4):408-414.

645. Patton, D.R. 1991. Chapter 8. The ponderosa pine forest as wildlife habitat. In: Tecle, A. and W.W. Covington, Technical editors. 1991. Multiresource management of southwestern ponderosa pine forests: The status of knowledge. USDA Forest Service, Southwest Region Report, pp. 361-410.
646. Patton, D.R.; Ffolliott, P.F. 1975. Selected bibliography of wildlife and habitats for the Southwest. USDA Forest Service, General Technical Report RM-16.
647. Patton, D.R.; Hudak, H.G.; Ratcliff, T.D. 1976. Trapping, anesthetizing and marking the Abert squirrel. USDA Forest Service, Research Note RM-307.
648. Patton, D.R.; Ratcliff, T.D.; Rodgers, K.J. 1976. Weight and temperature of the Abert and Kaibab squirrels. The Southwest Naturalist 21(2):236-238.
649. Pearson, H.A. 1968. Thinning, clearcutting, and reseedling affect deer and elk use of ponderosa pine forests in northern Arizona. USDA Forest Service, Research Note RM-119.
650. Reynolds, H.G. 1972. Wildlife habitat improvement in relation to watershed management in the Southwest. Arizona Watershed Symposium Proceedings 16:10-17.
651. Reynolds, H.G.; Clary, W.P.; Ffolliott, P.E. 1970. Gambel oak for southwestern wildlife. Journal of Forestry 68:545-547.
652. Szaro, R.C. 1976. Population densities, habitat selection, and foliage use by the birds of selected ponderosa pine forest areas in the Beaver Creek Watershed, Arizona. PhD Dissertation, Northern Arizona University, Flagstaff, Arizona.
653. Szaro, R.C.; Balda, R.P. 1975. The effects of seasonality on bird communities in the ponderosa pine forest. Proceedings, Cooper Ornithological Society Meeting, Montana State University, Bozeman.
654. Szaro, R.C.; Balda, R.P. 1979a. Bird community dynamics in a ponderosa pine forest. Studies in Avian Biology, 3:1-66.
655. Szaro, R.C.; Balda, R.P. 1979b. Effects of harvesting ponderosa pine on nongame bird populations. USDA Forest Service Research Paper RM-212.
656. Szaro, R.C.; Balda, R.P. 1982. Selection and monitoring of avian indicator species: An example from a ponderosa pine forest in the Southwest. USDA Forest Service, General Technical Report RM-89.
657. Szaro, R.C.; Balda, R.P. 1986. Relationships among weather, habitat structure, and ponderosa pine forest birds. Journal of Wildlife Management 50(2):253-260. Yearly variation in resource-use behavior by ponderosa pine forest birds. Studies in Avian Biology, 13:226-236.
659. Turkowski, F.J. 1980. Carnivore food habits and habitat use in ponderosa pine forests. USDA Forest Service, Research Paper RM-215.
660. Umess, P.J.; Neff, D.J.; Vahle, J.R. 1975. Nutrient content of mule deer diets from ponderosa pine range. Journal of Wildlife Management 39(4):670-673.
661. Umess, P.J.; Neff, D.J.; Watkins, R.K. 1975. Nutritive value of mule deer forages on ponderosa pine summer range in Arizona. USDA Forest Service, Research Note RM-304.
662. Umess, P.J.; Smith, A.D.; Watkins, R.K. 1977. Comparison of *in vivo* and *in vitro* dry matter digestibility of mule deer forages. Journal of Range Management 30(2):119-121.

663. Wallmo, C. 1964. Arizona's "educated" deer. *Wildlife Views* 11(6):4-9.
664. Wallmo, C.; Neff, D.J. 1970. Direct observations of tamed deer to measure their consumption of natural forage. In: Range of wildlife habitat evaluations research symposium. USDA Miscellaneous Publication 1147, pp. 105-110.
665. Barger, R.L.; Ffolliott, P.E. 1964. Specific gravity of Arizona Gambel oak. USDA Forest Service, Research Note RM-19.
666. Barger, R.L.; Ffolliott, P.E. 1965. Specific gravity of alligator juniper in Arizona. USDA Forest Service, Research Note RM-40.
667. Barger, R.L.; Ffolliott, P.E. 1970. Evaluating product potential in standing timber. USDA Forest Service, Research Paper RM-57.
668. Barger, R.L.; Ffolliott, P.F. 1971a. Effects of extractives on specific gravity of southwestern ponderosa pine. USDA Forest Service, Research Note RM-205.
669. Barger, R.L.; Ffolliott, P.F. 1971b. Prospects for cottonwood utilization in Arizona. *Progressive Agriculture in Arizona* 23(3):14-16.
670. Barger, R.L.; Ffolliott, P.E. 1972. The physical characteristics and utilization of major woodland tree species in Arizona. USDA Forest Service, Research Paper RM-83.
671. Barger, R.L.; Ffolliott, P.E. 1976. Factors affecting occurrence of compression wood in individual ponderosa pine trees. *Wood Science* 8(3):201-208.
672. Ffolliott, P.E. 1977. Product potential of pinyon-juniper woodlands. In: Aldon, E. E, and T. J. Loring, technical coordinators. Ecology, uses, and management of pinyon-juniper woodlands: Proceedings of the workshop. USDA Forest Service, General Technical Report RM-38, pp. 28-31.
673. Ffolliott, P.E.; Barger, R.L. 1967. Occurrence of stem features affecting quality in cutover southwestern ponderosa pine. USDA Forest Service, Research Paper RM-28.
674. Ffolliott, P.E.; Barger, R.L. 1976. Primary wood product recovery from cutover ponderosa pine timber in north-central Arizona. Arizona Agricultural Experiment Station, Miscellaneous Report 1.
675. Ffolliott, P.E.; Clary, W.P. 1986. Pinyon-juniper woodlands in the Southwest. In: Ffolliott, P.E, and W.T. Swank, ed. Potentials of noncommercial forest biomass for energy. Arizona Agricultural Experiment Station, Technical Bulletin 256, pp. 3-10.
676. Ffolliott, P.E.; Larson, E.R.; Barger, R.L. 1971. Predicting scaled volume recoverable from cutover southwestern ponderosa pine stands. USDA Forest Service, Research Note RM-195.
677. Ffolliott, P.F.; Rasmussen, W.O.; Gottfried, G.J. 1983. Stem characteristic changes affect long-term planning for timber resource utilization. *Forest Products journal* 33:57-60.
678. Ffolliott, P.E.; Rasmussen, W.O.; Patterson, J.G. 1980. Biomass for energy: Potentials in Arizona. *Bioresources Digest* 2:240-247.
679. Fox, B.E. 1987. Fuelwood opportunities from Arizona pinyon-juniper stands. In: Everett, R.L., compiler. Proceedings of the Pinyon-juniper Conference, Reno, Nevada, USDA Forest Service, General Technical INT-

215, pp.173-176.

680. Patterson, J.G. 1980. Potential energy equivalents of vegetation types in Arizona. MS Thesis, University of Arizona, Tucson, Arizona.

681. Schlund, S.S. 1982. Potential energy equivalents of biomass residues from land management practices in Arizona. MS Thesis, University of A-rizona, Tucson, Arizona.

682. Senn, R.A., Jr. 1977. The effect of time on ponderosa pine stem form. MS Thesis, University of Arizona, Tucson, Arizona.

683. Senn, R.A., Jr.; McMurtray, M.; Ffolliott, P.E; Gottfried, G.J.; Larson, ER. 1981. Effects of southwestern ponderosa pine mortality on potential wood product recovery. USDA Forest Service, Research Note RM-399.